YASKAWA

YASKAWA Report 2013

YASKAWA ELECTRIC CORPORATION

Introduction

Since its founding in 1915, and based on its management principle of contributing to the evolution of society and the welfare of humankind through the performance of its business, Yaskawa Electric has provided continuing support for the key industries of the times from motors and factory automation to the mechatronics* of today.

At present we are working toward the first centenary of Yaskawa Electric's founding in 2015 by taking on the challenges of high-efficiency utilization of natural energy and the realization of a society in which people and robots coexist. Our mechatronic products hold the top share in the global market, and we will make use of the technology underlying this achievement to contribute to solutions for issues that are emerging on a global scale.

* Yaskawa Electric led the world in putting forward the term "mechatronics" in the late 1960s. This concept evolved when we combined our customers' machinery with Yaskawa's electronic products to create superior quality and function.

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● Business Report

● CSR Report

● Financial Report

Notes:

1. Figures under one million yen presented in this Yaskawa Report are rounded down unless otherwise stated.
2. Forward-looking statements are based on information available to management at the time this Yaskawa Report was prepared as well as assumptions that management believes are reasonable. Actual results may differ significantly from these statements for a number of reasons.
3. The organizations covered by this report are the 67 consolidated subsidiaries of Yaskawa Electric and the 18 affiliated companies to which the equity method is applied.
4. Fiscal year 2012 means the consolidated fiscal year from March 21, 2012 to March 20, 2013.
5. Scope of Environmental Report (P34-P41)
   Period: March 21, 2012 to March 20, 2013 Organizations: Yaskawa Electric and the following affillates
   Yaskawa Manufacturing Corporation / Yaskawa Electric Engineering Corporation / Yaskawa Logistec Corporation / Yaskawa Information Systems Corporation / Yaskawa Controls Co., Ltd. / Yaskawa Siemens Automation & Drives Corp. / Yaskawa Motor Corporation / DOEI Corporation / Yaskawa Obvious Communications Inc. / Yaskawa Techno Plate Corporation / Field Techno Co., Ltd., / SHANGHAI YASKAWA DRIVE CO.,LTD. / YASKAWA AMERICA, INC. / YASKAWA NORDIC AB / YASKAWA ELECTRIC UK LTD. / YASKAWA EUROPE GmbH

Consolidated Financial Highlights

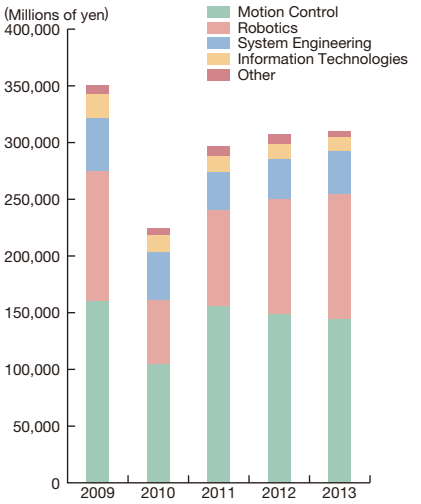
Yaskawa Electric Corporation and Consolidated Subsidiaries
Years ended March 20 or as of March 20

(Millions of yen)

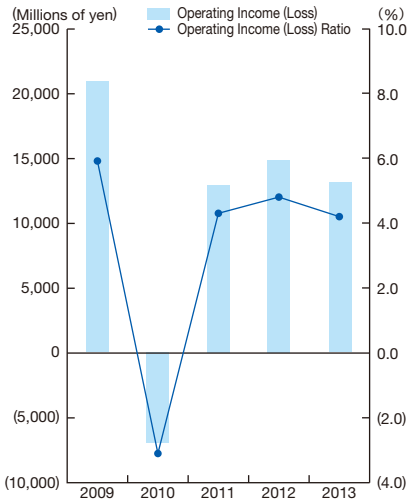
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Net Sales		263,045	309,615	322,916	368,971	382,327	350,249	224,710	296,847	307,111	310,383
Operating Income		12,407	17,527	24,486	33,564	36,487	20,806	(6,977)	12,874	14,818	13,070
Operating Income Ratio		4.7%	5.7%	7.6%	9.1%	9.5%	5.9%	(3.1%)	4.3%	4.8%	4.2%
Ordinary Income		12,010	17,414	24,331	33,383	35,212	20,024	(6,049)	13,429	15,626	14,053
Ordinary Income Ratio		4.6%	5.6%	7.5%	9.0%	9.2%	5.7%	(2.7%)	4.5%	5.1%	4.5%
Net Income		5,819	1,860	10,157	18,982	20,242	6,892	(5,699)	6,544	8,432	6,800
Net Income Ratio		2.2%	0.6%	3.1%	5.1%	5.3%	2.0%	(2.5%)	2.2%	2.7%	2.2%
Sales and Profit by Business Segment*1											
Motion Control	Net Sales	105,069	122,944	133,909	159,601	177,899	160,848	104,814	156,450	149,410	144,333
	Operating Income	4,037	9,121	12,278	19,832	21,370	11,755	(3,169)	8,980	5,824	3,248
	Operating Income Ratio	3.8%	7.4%	9.2%	12.4%	12.0%	7.3%	(3.0%)	5.7%	3.9%	2.3%
Robotics*2	Net Sales	80,479	105,164	113,458	126,723	123,550	114,124	57,084	83,843	101,065	110,223
	Operating Income	5,266	7,282	9,850	8,983	8,576	3,200	(8,327)	1,673	7,014	8,365
	Operating Income Ratio	6.5%	6.9%	8.7%	7.1%	6.9%	2.8%	(14.6%)	2.0%	6.9%	7.6%
System Engineering	Net Sales	40,373	44,930	41,932	49,487	50,517	46,768	41,498	34,349	35,520	37,263
	Operating Income	958	(2,092)	(259)	1,814	3,940	4,637	5,476	2,061	1,917	1,504
	Operating Income Ratio	2.4%	(4.7%)	(0.6%)	3.7%	7.8%	9.9%	13.2%	6.0%	5.4%	4.0%
Information Technologies	Net Sales	24,415	25,421	24,783	26,472	23,183	21,342	15,546	14,132	12,826	12,786
	Operating Income	1,172	1,500	1,042	1,192	420	616	(934)	(398)	(139)	(241)
	Operating Income Ratio	4.8%	5.9%	4.2%	4.5%	1.8%	2.9%	(6.0%)	(2.8%)	(1.1%)	(1.9%)
Sales by Destination											
Japan		164,563	179,362	171,569	200,275	190,822	169,086	116,197	144,754	143,019	143,456
The Americas*3		34,456	40,725	51,286	55,343	50,947	43,943	29,351	38,779	43,985	51,113
Europe		31,233	34,588	39,766	46,566	58,424	52,887	24,332	29,610	33,939	32,047
Asia		30,356	51,538	58,310	65,249	80,869	82,830	53,900	82,749	85,276	81,308
Other		2,437	3,402	1,985	1,538	1,265	1,503	930	955	890	2,456
Overseas Sales Ratio		37.4%	42.1%	46.9%	45.7%	50.1%	51.7%	48.3%	51.2%	53.4%	53.8%
Per Share Information (yen)											
Earning - basic		24.80	7.80	43.18	81.12	81.46	27.38	(22.64)	26.00	33.51	27.03
Earning - diluted		23.32	7.30	39.72	75.29	80.50	–	–	–	–	25.65
Dividends		3.0	0.0	6.0	6.0	10.0	13.0	3.0	6.0	10.0	10.0
Shareholders' Equity		36,715	38,366	52,750	80,787	100,862	97,068	88,459	93,220	100,109	112,218
Shareholders' Equity Ratio		14.7%	15.1%	20.7%	29.6%	34.9%	39.0%	36.6%	35.2%	35.9%	37.1%
ROE: Return on Equity		17.3%	5.0%	22.3%	28.4%	22.3%	7.0%	(6.1%)	7.2%	8.7%	6.4%
Interest-bearing Debt		79,962	77,807	62,556	46,750	33,829	32,894	42,235	41,439	58,612	54,684
Debt-to-equity Ratio (times)		2.2	2.0	1.2	0.6	0.3	0.3	0.5	0.4	0.6	0.5
Inventories		54,345	52,681	58,177	58,136	57,902	54,705	46,200	58,066	63,798	64,325
Inventory Turnover (months)		2.5	2.1	2.1	1.9	1.8	1.9	2.7	2.1	2.4	2.5
Capital Expenditures		6,887	7,918	9,154	8,452	9,121	8,611	4,119	6,655	9,908	15,895
Depreciation and Amortization		6,047	6,499	6,699	6,962	7,676	8,028	7,840	7,057	7,606	8,114
Research and Development Expenses		7,572	7,738	8,073	8,417	9,738	9,704	8,493	9,724	10,398	10,731
Number of Employees (persons)		7,635	7,620	7,754	8,056	8,347	8,463	8,176	8,085	8,246	10,383

*1 Starting the fiscal year ending March 2014, reportable segments changed to the following 3 segments: Motion Control, Robotics, and System Engineering. The Information Technologies segment will be included in Other. There have also been partial changes in the division of businesses within these segments. Value and profit ratios of each segment for the period ended March 2013 are based on figures before the change was implemented.
*2 The segment name was changed from "Robotics Automation" to "Robotics." (effective the year ended March 2007)
*3 The segment name was changed from "North America" to " the Americas." Sales for Brazil, previously included in "Other," are included in "the Americas" (effective the year ended March 2006).

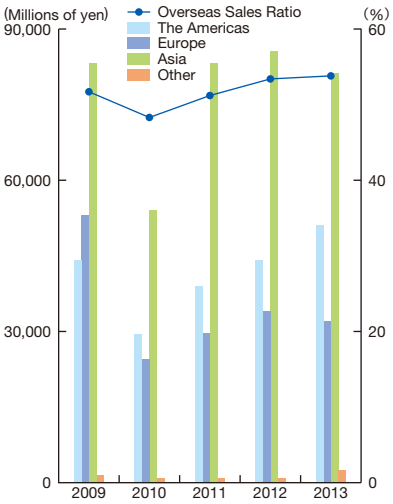
Net Sales: Breakdown by Business Segment



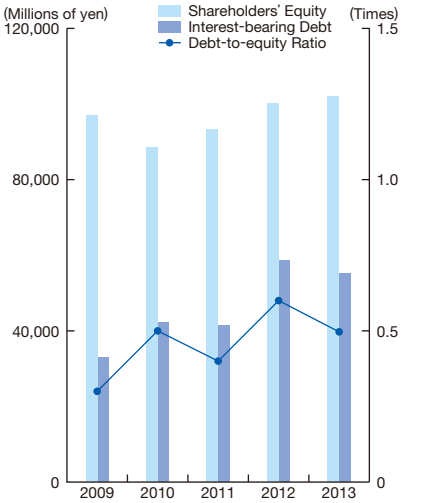
Operating Income (Loss) and Operating Income (Loss) Ratio



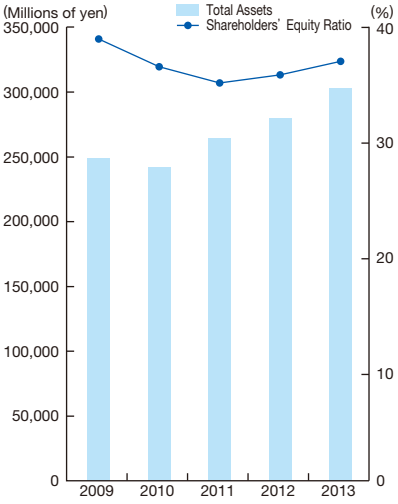
Overseas Sales and Overseas Sales Ratio



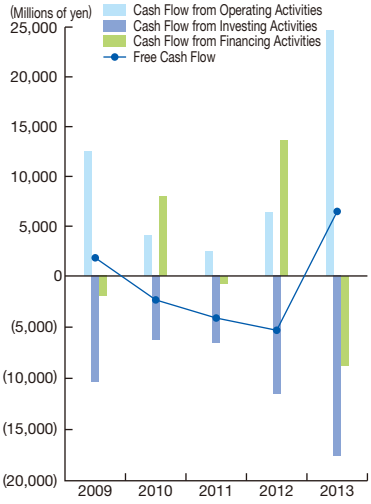
Shareholders' Equity, Interest-bearing Debt and Debt-to-equity Ratio



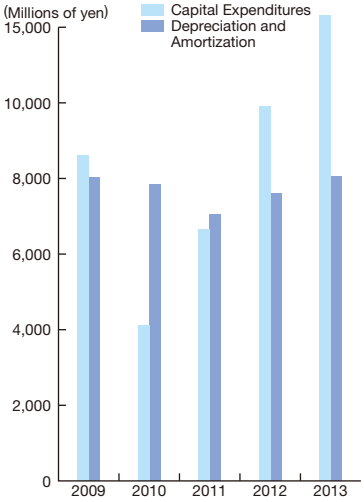
Total Assets and Shareholders' Equity Ratio



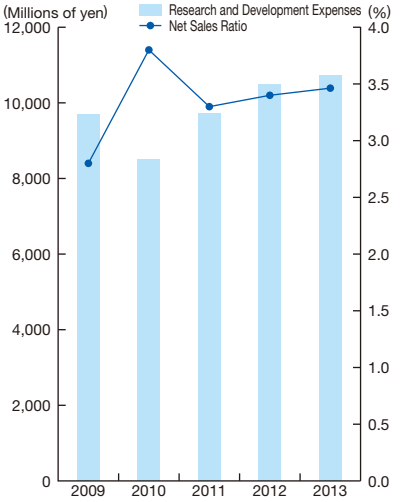
Cash Flows



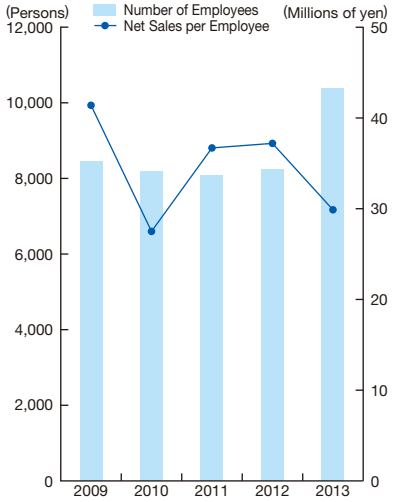
Capital Expenditures and Depreciation and Amortization



Research and Development Expenses and Net Sales Ratio



Number of Employees and Net Sales per Employee



Interview with the President

The new mid-term plan "Realize 100" began this year. 2015 will mark our 100th anniversary. Our goal for this momentous occasion is to achieve record-high performance by further expanding our core businesses around the world and growing our new businesses.

Junji Tsuda
Representative Director
Chairman of the Board
President

Yaskawa Electric's new mid-term business plan "Realize 100" started in FY2013 (year ending March 2014). The plan aims to realize a high profitability structure by harvesting and continuously evolving the results produced in our previous mid-term business plan "Challenge 100" which include acceleration of global expansion and growing new businesses.

Furthermore, we will strive to achieve record-high performance and realize continuous growth by establishing a *glocal* business structure* in order to become the runaway global leader in our core businesses and creating new businesses.

* Globally-oriented management structure capable of optimal response on the local level anywhere in the world.

Q1 : FY2012 was the final year of the mid-term business plan "Challenge 100". Looking back, what sort of a year was it?

A1 : FY2009, the first year of "Challenge 100", posed significant challenges to the Yaskawa Group—foremost of those the global financial crises. The extremely adverse conditions continued for the next few years. Our company saw an increasingly strong yen, steep rise in magnet prices, and a reduction in orders due to a stagnant semiconductor market.

The business environment became even worse in FY2012 due to the financial crises in Europe and decelerated economic development in Asia, particularly China. Looking by segment, however, net sales and operating profit in our robotics business increased due to steady capital investment in the automotive industry. In addition, our new photovoltaic (hereafter PV) power conditioner business saw a sharp increase in demand from the second half of FY2012, and our drives business performed strongly.

Unfortunately, revenue from our AC servo business dropped dramatically due to falling demand in the semiconductor, LCD, and electronics components market from the second half of year, which caused net sales and operating profit for the motion control segment to decline.

This resulted in net sales of 310,383 million yen (up 1.1% from FY2011) and an operating profit of 13,070 million yen (down 11.8% from FY2011), ordinary income of 14,053 million yen, and net income of 6,800 million yen (down 19.3% from FY2011). Although we achieved an increase in sales, we suffered a loss in profit.

However, despite this adverse environment of stagnant market growth, we were able to make significant progress in our preparations for future growth through such efforts as aggressive investment in production automation and labor saving initiatives in Japan, re-examining our expense structure, expanding our global production system and sales network, and aggressively driving M&A efforts in order to shift to a high profitability structure as a global company.

Q2 : Tell us about the specific results achieved in the previous mid-term business plan "Challenge 100".

A2 : The first was our response to the super-strong yen. Basing production at the point of demand, we accelerated local production and procurement efforts in Asia focusing on China, and worked to build a strong business culture that is not impacted by the exchange rate with a focus on keeping costs down.

In particular, we boosted production capacity in China through efforts such as establishing a second AC servo motor plant in Shenyang in FY2012, and starting a robotics plant in Changzhou in May 2013. We expanded our production ratio outside Japan from 20% in the end of FY2010 to 30% by the end FY2012. This has gradually reduced the impact of the exchange rate on our performance.

The second was our measures against rising magnet prices. The price of rare earth metals—the raw material used in magnets—rose sharply from early 2011. This was a major factor in the decline in profitability of our AC servo business line—one of our core businesses. Thanks to measures started in FY2012 such as our launch of a reduced rare-earth metal motors, and also due to the reduction in the price of rare earth metal itself, we anticipate being able to dramatically reduce the negative effect in FY2013.

The third is expanding sales in an adverse market which has not seen significant growth. In FY2012 we aggressively drove forward M&A efforts to expand our sales network. Our first acquisition was German PLC manufacturer VIPA. Leveraging this sales network, we are expanding share of the German market, where share of our products had previously been low. Our next acquisition was Canadian energy systems integrator Wermac Electric. We are also putting effort into expanding our sales network in North America, where demand related to energy such as shale gas is expected to grow.

Moreover, during the "Challenge 100" period we worked to develop new business lines leveraging our Group's core technologies and sowed many seeds. In particular, riding the tail wind of the feed-in tariff scheme for renewable energy, PV power conditioner sales far exceeded our final target of 4 billion yen for FY2012 and grew into an over 7 billion yen business.

Q3 : Tell us about your market outlook for FY2013.

A3 : Market trends for FY2013 that involve the Yaskawa Group shows that although a dramatic recovery compared to FY2012 will be unlikely, few markets will become worse than they are now. The semiconductor, LCD, and electronic component market—the main market for our AC servo business, which had been flat are expected to recover, and demand for PV power conditioners is expanding. Moreover the automobile-related market, which is one of our main markets, will continue aggressive capital investment both within and outside Japan focusing on emerging nations and North America.

Looking at individual regions, the flat economic growth that Europe and China saw in FY2012 has started to recover, and we anticipate the continued healthy economic growth in the US and weak yen to vitalize the Japanese economy.

I think that this year will prove to be brighter than FY2012 overall, but we cannot be too optimistic as there are many aspects of the global economic outlook that remain unclear.

Q4 : Tell us your targets and initiatives for FY2013—the first year of the new mid-term business plan "Realize 100".

A4 : Our Group's performance targets for FY2013 incorporate the expected fruits of the initiatives we carried out in FY2012 and the impact of the weak yen, based on the assumption that the market will not recover dramatically from FY2012. They also take into account the uncertain state of the world.

In FY2013 we plan to roll out initiatives such as cutting costs by expanding production and procurement outside Japan focusing on China, starting robotics production in China, reorganizing our plants in Japan, launching new products, and ensuring that the results of the initiatives are harvested.

As for our new PV power conditioner business, in FY2013 we expect demand to remain high throughout the year and plan to achieve sales of 14 billion yen—double that of FY2012.

The weak yen trend after the beginning of this year will be a plus factor as well. The impact of exchange rate fluctuations on our company's performance has dropped gradually year after year due to increased production outside Japan, but compared with the actual exchange rate in FY2012 (82 yen to USD, 106 to the Euro), we anticipate the exchange rate to be a factor in boosting revenue.

Under these circumstances, we are aiming to achieve net sales of 350 billion yen (up 12.8% from FY2012) and operating profit of 24 billion yen (up 83.6% from FY2012) for FY2013.

Q5 : The "Realize 100" new mid-term business plan is comprised of three basic policies: establishment of a high profitability structure, realization of a glocal management structure, and creation of new markets and developing them into core businesses. Could you give a more detailed explanation of each policy?

A5 : Realize 100 signifies an important mid-term business plan as FY2015 marks a major milestone—100 years since our founding. Allow me to elaborate on each policy.

The first refers to establishing a high profitability structure by building more efficient development, production, and sales structures. By accelerating expansion of production and procurement at the point of demand with a focus on China, we plan to increase our ratio of production outside Japan from 30% at the end of FY2012 to 50% by FY2015. Within Japan we plan to maintain production output by expanding sales into new businesses and markets. Furthermore, we aim to increase the operating profit ratio to at least 10% by FY2015 through improving efficiency of production via expanding automation in Japanese plants, launching new core products, and rolling out cost-cutting initiatives on a company-wide level.

The second is "realization of a glocal management structure." This refers to building a management structure that can optimally respond to needs and changes in the business environment of each country or region in a timely manner. In terms of development, we aim to expand net sales outside Japan from 54% in FY2012 to 65% by FY2015 and become the runaway leader in all of our core businesses by increasing our development force fourfold focusing on China and Europe, and building a locally-based development system by FY2015.

The third is "creation of new markets and developing them into core businesses." Yaskawa Group will proactively take on the challenge of building new businesses without fear of failure in the environmental and energy business field and create more businesses like our successfully developed PV power conditioner business, as outlined in our 2015 Vision*. Prospects look bright to develop new businesses such as the electrical products for large-scale wind power generation and motor drive systems for electric vehicles – which did not realize full-scale development in Challenge 100. We aim to fully expand these businesses in the Realize 100 plan period.

In the robotics segment, we have begun new efforts in the biomedical field. We are developing robots for new applications – robots capable of complex and delicate tasks such as dispensing, stirring, and separating reagents and blood, which researchers previously did by hand, in addition to dangerous work in particular. Efforts are also being driven forward to promote the use of robots in fields such as social service and long-term care where demand is expected to expand due to the increasing aged population.

We are taking steps to ensure the execution of each initiative in order to achieve record-high net sales of 400 billion yen and operating profit of 40 billion yen in FY2015.

* For details on 2015 Vision, visit the official Yaskawa Electric website.
http://www.yaskawa.co.jp/en/vision/index.html

Main policies of the "Realize 100"

Operating income above **10%**

Net sales outside Japan at **65%**

New business net sales above **40B JPY**

• Financial Goals

Units : billion JPY	FY2012 Actual	FY2013 Goals	FY2014 Goals	FY2015 Goals
Net sales	310.3	350.0	370.0	400.0
Net sales of new business	10.4	20.0	27.5	40.0
Operating income	13.0	24.0	30.0	40.0
Operating income ratio	4.2%	6.9%	8.1%	10.0%

Note : Exchange rate assumptions for 2013-2015 : 1 USD=90 JPY, 1 EUR=120 JPY

Q6 : What do you prioritize in the development of new robotics markets?

A6 : Up to now, the use of industrial robotics has been limited mostly to automobile production. The automobile industry began implementing robotics on their production lines early on. Thus they already possess a high level of know-how regarding the use of robotics.

There are not nearly enough system integrators with the know-how for using industrial robotics in other industries, so few companies outside the automotive industry have implemented robotics into their operations. Aiming to cultivate system integrators with a high level of knowledge and know-how in robotics usage, we have set up "Robotics Centers" around the world where people can see, touch, and learn about robots. Such facilities have already been placed in Japan, USA, Europe, China, and Brazil, and from FY2013 we have begun to accelerate opening new centers around the globe focusing on China and South East Asia. By expanding our company's SI network we aim to create new markets and develop new applications.

In order transform the current reality in which the handling of robotics is limited to engineers on the manufacturing floor, to bringing their use into new fields such as social services, long-term care, and areas even more intimate to people's daily lives, we need to develop robots that anyone can use. There are many technological and safety issues that need to be overcome to accomplish this, and we are boosting efforts to develop technological innovations.

Q7 : Lastly, 2015 will mark the company's 100th anniversary. As a global corporation based in Kitakyushu, where do you want to be in 2015?

A7 : For our 100th anniversary project in 2015 we will be renovating our main plant in Kitakyushu under the name "Robot Village". By implementing changes such as putting a garden in the Village that is accessible to the public, we want to provide everyone—including local residents, business partners, and employees—the opportunity to enjoy and experience our products and services, with a focus on robotics. And by providing information on building a new society where humans and robots co-exist, we hope to create opportunities to promote the remarkable manufacturing capabilities Japan has to offer and help to vitalize the local region starting with Kitakyushu.

Yaskawa Group's strong suit lies in our manufacturing capabilities—our ability to develop components and offer solutions—cultivated over nearly 100 years of starting up motors with our customers. Leveraging the strengths of our core businesses, we will continue to expand and create new businesses, further improve our corporate value, and achieve continuous growth through offering products and services that contribute to the environment and the community.

Lastly, I would like to thank all of our stakeholders' for your continued support and patronage.

July, 2013

Representative Director
Chairman of the Board
President

Junji Tsuda

– Aiming Towards Realization of 2015 Vision –

Yaskawa Electric has established the vision of "using the group's core technologies to solve emerging global problems" for the years leading up to its 100th anniversary in 2015. In the "Environment & Energy" business domain, we contribute to resolving environmental and energy issues through both energy creation and energy conservation. In the "Robotics Human Assist" business domain, we strive to provide solutions to combat problems associated with declining birthrate and aging population in advanced countries. This feature describes our initiatives to create new markets in these two business domains.

Initiatives in the Environmental Energy Business Domain

Breaking into New Markets with PV Power Conditioners*

As interest in using renewable energy continues to increase throughout the world, solar power markets are growing exponentially. To steadily respond to the needs of this market, in 2010 Yaskawa Electric first released the PV1000, a 10 kW PV power conditioner for industrial use. Then Yaskawa fully entered the market by adding the 100 kW Enewell-SOL in 2011 as well as the 4.5 kW and 5.8 kW PV power conditioner for residential use in 2012. In July 2012, the feed-in tariff scheme for purchasing full amount of power from renewable energy sources was launched in Japan. In response, mega solar power plants have been popping up all over the country, resulting in a sudden increase in demand for PV power conditioners.

10 kW
"PV1000"
Released in 2010

100 kW
"Enewell-SOL"
Released in 2011

4.5 kW, 5.8 kW
PV power conditioner for residential use
Released in 2012

Yaskawa Electric first began working on power conditioners in 1997, when we fabricated a sample to fulfill a customer request. Unfortunately, the solar power market was almost nonexistent at the time, so it did not develop into a full-scale business. Ten years later we took up the challenge once again. Our first power conditioner product was completed in 2010.

PV1000 production line in Yukuhashi Plant

* PV power conditioners:
They convert the DC energy generated by solar power systems into AC power that can be used by residential homes and commercial facilities.
They are composed of inverters, transformers, power supplies (e.g. electrolytic capacitors), cooling fans and other components.

When we eventually began commercial production of power conditioners, there were a few manufacturers that had entered the market 5-10 years before us. As newcomers to the market, we focused on raising name recognition and brand awareness. At the time none of our competitors offered both home and industrial products, so leveraging our product line-up as a vehicle to promote ourselves as power conditioner specialists, we took top share in the 10 kW industrial power conditioner market in Japan as of the end of fiscal 2012. High reliability is essential in solar power system equipment, which must continue operating for an extended period of at least 20 years—and this includes power conditioners. The credibility we have earned from the market cultivated over many years of manufacturing robots, servos, and AC drives was a major factor that led to the successful development of our power conditioner business.

One solution we offer that sets us apart from our competitors is to install numerous 10 kW power conditioners on mega-solar power plants. Most conventional mega-solar power plants have only a small number of large-capacity 250 or 500 kW power conditioners installed. But if one of those units were to become damaged, it would result in a significant loss of power. Alternatively, installing a large number of small units minimizes power loss if one of these units should malfunction, and it also makes it easier to identify which panel has failed. Some have raised the concern that increasing the number of power conditioners would make maintenance more difficult, but we offer this solution and enthusiastically advocate its benefits with the utmost confidence in the quality and reliability of our power conditioners. And judging from our sales record, our customers have come see its advantages as well.

3 Merits of dispersed power conditioners

1. Maximize power generation

If one power conditioner stops, only 10 kW is lost. Distributed monitoring enables speedy detection of photovoltaic panels with malfunctions, and reduces power loss.

2. Save space

Power conditioners can be installed directly under the panels, and eliminate the need for cooling devices and other equipment.

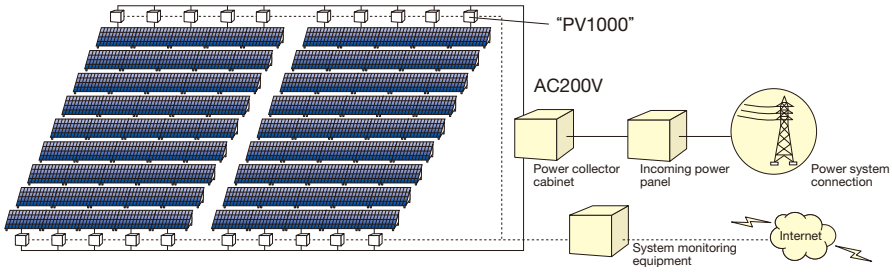
3. Make construction work safer

Dispersed power conditioners minimize the distance over which DC power is sent, so construction work is safe.

Mega solar plant with PV1000s (Hirohara, Miyazaki)
Power producer:
Daini Corporation

PV1000 can be installed directly under solar panels

◆ Example of 10-kW power conditioners dispersed in a mega solar-power plant



Following the Great East Japan Earthquake, Japan's energy policy has been approaching a transitional stage. Demand for renewable energy will continue to grow steadily. The solar power market has been growing dramatically in Japan during the 2012 fiscal year, because the Japanese government introduced the feed-in tariff scheme. To grow the business further, we need to expand our bussiness overseas. Determining how to approach overseas markets will be a critical point for fiscal 2013. We are exploiting the strength of the Yaskawa Electric brand and accelerating efforts centered on China and the United States, where demand for renewable energy is expected to increase.

Initiatives in the Robotics Human Assist Business

Mahoro*: General-purpose, Dual-arm Robot as Skilled Researcher

Yaskawa Electric is developing applications for new-generation robots for non-manufacturing industries. The Mahoro humanoid robot is attracting particular attention now. Yaskawa developed the robot together with the National Institute of Advanced Industrial Science and Technology (AIST) for the purpose of automating laboratory tasks in the fields of life sciences. In the life sciences laboratory, manual work in conducting experiments to develop new drugs, gene analysis, and other tasks take up much of researchers' valuable time and can cause inconsistent and unreliable results, not to mention the potential risk of exposing researchers to dangerous drugs or bacteria. These issues have led to a call for automation.

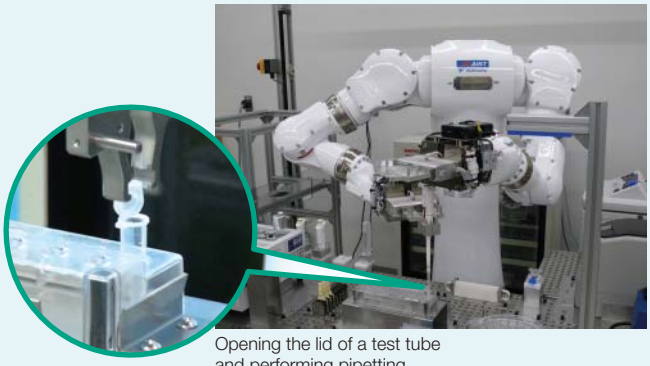
It was the International Robot Exhibition in 2007 that began our efforts in applying robotics in the biomedical field. It all started when Tohru Natsume from AIST saw our dual-arm robot at our company's booth and began discussing the possibility of automating laboratory tasks with us. At the time, the just-launched dual-arm robot had seven axes in each arm and one axis in the body for a total of 15 degrees of freedom. Its most groundbreaking features were that it was of equal size and possessed the same movement capabilities as humans. The robot was developed to perform more complex work than conventional robots, as a solution to the problem of labor shortage resulting from the decline in birthrate and increasing aged population in Japan, and the expansion of its application into new areas had been much anticipated.

Concrete efforts to apply the robot to the biomedical field had begun, but quantifying tasks that humans do without effort and directing the robot to carry them out was proving to be difficult. In pipetting, for instance, researchers take the contents of a test tube with a pipette and dispense it into other test tubes. Lowering the pipette and properly dispensing its contents into tubes requires skill. When scraping cells from a petri dish, the amount of force used has to be moderated to avoid damaging the cells. Movements people learn through experience is difficult to explain, but thanks to researchers' cooperation, the robot was able reproduce such movements after much trail and error.

Mahoro Features

- **Can repeatedly perform high-precision tasks**
- **A single robot can perform the same tasks humans do using the same tools humans use.**
  (Most conventional robots require the use of specialized tools.)
- **Usable in a variety of environments**
  (Can perform tasks under anoxic conditions and environments where dangerous drugs and bacteria are handled.)

Scraping a cell culture using a spatula



Opening the lid of a test tube and performing pipetting

* The name, "Mahoro", reflects our desire to provide a better research environment and it is based on the archaic Japanese word, mahoroba, which means an ideal place like Utopia.

To differentiate ourselves from other companies involved in the development and commercialization of devices for automating lab tasks, we leverage one of our strong suits—the versatility of our dual-arm robots. The biomedical field covers a wide range of areas; from blood tests and experiments using bacteria that are too risky to be performed by humans, to cultivar improvement of agricultural products, and is expected to expand even further. As a next step we will strive to raise name recognition and brand awareness in the biomedical industry through aggressive promotional initiatives such as exhibiting in trade shows, while strengthening efforts to promote this technology across the globe. At the same time, we will further improve and evolve our robots to make them easier for researchers who are not familiar with operating robotics to use.

Person Who Named "Mahoro"

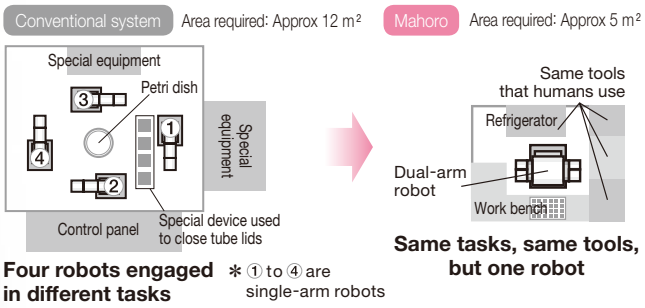
Tohru NATSUME,Ph.D.

Director
Molecular Profiling Research Center for Drug Discovery (molprof)

NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY (AIST)

Q Why did you want to use dual-arm robots?

I started working on the development of devices to automate experiments about 10 years ago, even before I first saw Yaskawa's dual-armed robot. It took us five years to develop the first system, and it used several single-arm robots and other devices. The system was specialized for particular procedures and particular testing apparatus, and we had difficulties adapting to any changes in experiments. Experimental work in the laboratory evolves on a day-to-day basis, and changes are an everyday occurrence. My idea was that a dual-arm robot using the same tools as human researchers could be used to automate tasks while maintaining the flexibility needed to adapt to changes.



Q What was your first impression when using Mahoro?

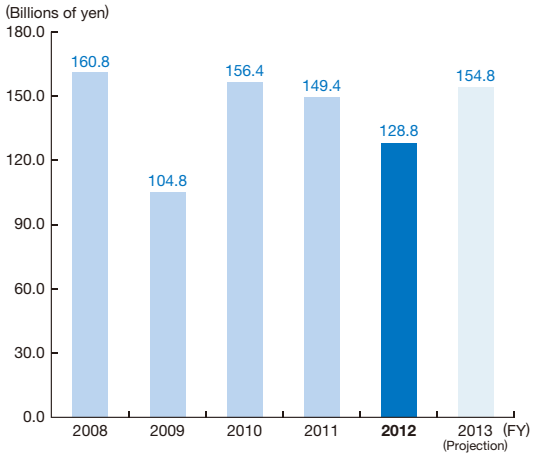
I found that the results from the experiments done by Mahoro had a higher level of reliability than was possible in experiments done by human researchers. Mahoro has the potential to bring about innovative advances in the biomedical field. By automating the procedures that researchers up to now have performed by hand, researchers can concentrate on their essential tasks, such as analyzing results and other higher value-added activities. We can expect a remarkable improvement in productivity throughout the life science sector as a whole.

Q What are your future expectations for Mahoro?

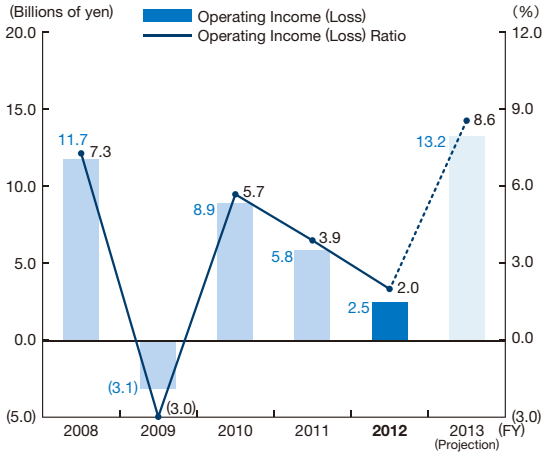
I would like the research lab of the future to have one Mahoro as an assistant for each human researcher. To do this, it will first be necessary to make robots that are easy for anybody to use, even for researchers who are not accustomed to them. If use of Mahoro becomes widespread in the future, then we will be able to let the robots conduct experiments and other tasks that last late into the night, so that researchers can spend more time with their families or plan to do something different just for a change. I want to realize an ideal workplace for those people who work in life sciences. We can leave work that robots excel at to the robots, so that people can concentrate on things that only people can do.

Motion Control

Net Sales
¥ 128.8 billion



Operating Income (Loss)
¥ 2.5 billion



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The Motion Control segment consists of our Motion and Control business (hereinafter "M&C") and Drives business. Affected by the strong yen and global economic slowdown, net sales and operating profit of FY2012 for the entire segment dropped from the previous year. For fiscal 2013 we expect a recovery in our core market and expansion of new businesses to result in increased sales and profit. This segment is made up of the following businesses.

Motion & Control Business

Our M&C business provides solutions to innovate customers' machinery and systems, leveraging motion control products such as AC servo drives, controllers, and linear motors, and our know-how in a variety of applications. We hold the highest global market share in the servo drive category, and our drives are used in a wide range of applications; notably, semiconductor and LCD manufacturing equipment, chip mounters, machine tools, robots, food processing and packaging machines, printing machines, and textile machines.

Review of FY2012 Operations

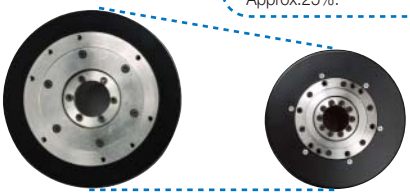
In fiscal 2012 our M&C business faced an extremely adverse business environment, which included the strengthening of the yen, slowdown of the business' core semiconductor/LCD/electronic components market and the Chinese market, the financial crisis in Europe, and rise in magnet prices. In order to strengthen efforts in growing markets under these harsh circumstances, we established a research center in Shenyang, China to facilitate the timely provision of solutions tailored to local needs and acquired German PLC manufacturer VIPA. These actions increased share and created new customers in the existing servo market by a fair amount. Furthermore, we worked to boost efficiency and build a global production system capable of responding to external environmental changes, such as sharp and sudden fluctuations in the exchange rate, by consolidating our production plants in Japan and opening a second plant in Shenyang.

High performance Σ-V-EX001
Released in October 2012

Motion Adaptor MA100
Released in May 2013

New Direct Drive Servomotor
SGMCV Series
Released in FY2013

Outer Diameter Reduced
Approx.25%.



Previous Model SGMCS

New Model SGMCV

Outlook

In first half of fiscal 2013 there has been strong capital investment in the smartphone/tablet market, so we expect a high number of orders from manufacturers who produce electronics and semiconductor components that are used in such devices. Looking at individual regions, sales are expected to remain flat in Europe but continue to be strong in China, Korea, and Japan.

In fiscal 2013 we are taking steps towards increasing the number of orders and share by boosting our presence in China and other Asian countries, through expanding our sales and service network. We plan to maximize the synergy with VIPA who we acquired last year to expand share in Germany. In addition, we will consecutively release several new products this year including new models of our servo drives, direct drive motors, linear motors, and controllers. We are also working on far-sighted initiatives for developing new businesses.

Drives Business

An AC drive is a device that controls the rotation speed of a motor by flexibly changing the power supply frequency of the motor. Besides industrial machinery, they are used in industrial air conditioning units, refrigerators, and washing machines, as well as in elevators and cranes. Using an AC drive enables finer control of the motor and boosts productivity of machinery while helping to dramatically conserve energy as the motor is only rotated when necessary. As the importance of conserving electricity and energy gains attention around the globe and awareness of efficient energy use increases further, energy efficient AC drives have come under the spotlight. Thanks to our advanced technological capabilities and top quality, our drives business products hold the highest share in the global market. And in recent years, by applying power electronics—the core technology of AC drives—we have expanded into new areas including motor drive systems for automobiles and power converters needed in compact distributed generation systems that use renewable, natural energy sources such as wind or solar power.

Review of FY2012 Operations

The Drives business is further divided into several smaller business units. In fiscal 2012 sales of existing businesses were sluggish, but strong for new businesses, as orders for photovoltaic power conditioners increased sharply bolstered by the feed-in tariff scheme for renewable energy. In growth markets, particularly China, we enhanced our ability to respond to customer needs by strengthening local development capabilities and engaging in sales activities specifically tailored to each application and region. We also provided energy conservation solutions to intelligently use energy by combining AC drive and storage cell technology. In terms of production, we built a strong business structure that is not impacted from the exchange rate while boosting cost competitiveness by establishing production sites at the point of demand in regions where demand is increasing, starting with our new Shanghai plant.

Outlook

In fiscal 2013, although slow growth is expected in the existing AC drive market, we plan to steadily expand the Drives business as a whole, driven by growth of our new photovoltaic power conditioner business. Our strategy will consist of building a structure to sell the right products in the right channels tailored to each application or region, focusing on growing markets like China. By increasing our area of coverage we expect to further increase the number of purchase orders. We will also enhance our back office sales force (sales support and marketing) and increase value offered to customers in order to strengthen selling power. In the long-term we aim to increase global share of our Drives business by 20%, enhance our market access capabilities, and boost our ability to propose solutions in order to achieve our goal of becoming the runaway global leader in the AC drive industry. We also aim to further expand the lineup and increase share of our new photovoltaic power conditioner business.

Integrated Machine Controller MP3200
integrates vision, robot and controller
Released in December 2011

Power Generative Unit
R1000

Released in July 2013

GaN based Power
Conditioner

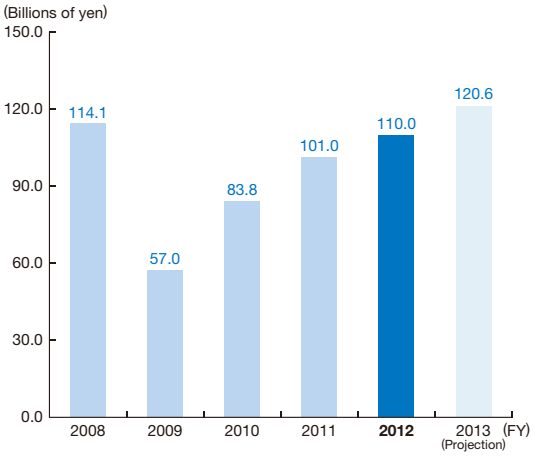
Under development

Power Conditioner
Model for industrial use (10 kW)
PV1000

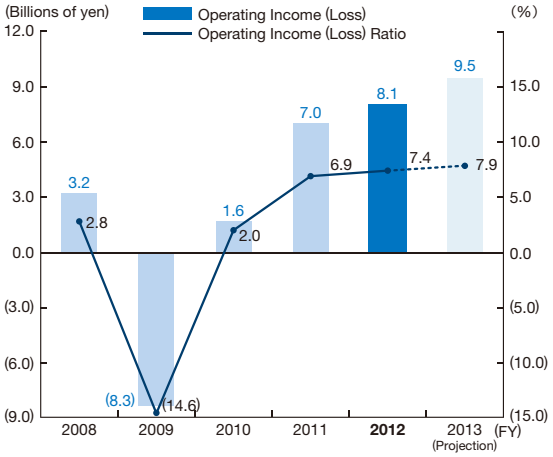
Released in September 2010

Robotics

Net Sales
¥ 110.0 billion



Operating Income (Loss)
¥ 8.1 billion



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Business Overview

Our Robotics segment contributes to the automation of various industrial processes including arc welding, spot welding, painting, assembly, and handling particularly in the automobile, electrical equipment and semiconductor markets.

We develop mechanical components and robot controllers in-house by using Yaskawa's technology of AC servo drives which have the largest share in the market. Thanks to the high rate of in-house procurement, we can develop products flexibly, enabling us to optimize our robots for a wide range of applications and precisely meet our customers' demanding requirements. Yaskawa is the world's leading manufacturer of robots, with cumulative shipments surpassing 270,000 in fiscal 2012.

Yaskawa has recently been developing non-manufacturing applications for our robots, such as in the biomedical and service sector, using our expertise in industrial robotic technology that we have built up over the years.

3D Shape Measurement Unit
MotoEye-3D
Released in November 2012

6-axis Force Sensing Control Unit
MotoFit
Released in Januery 2013

Review of FY2012 Operations

In fiscal 2012 this segment saw a strong demand for robotics, especially in the global automotive industry. Unfortunately, the LCD and semiconductor markets fell to low levels due a decline in capital investment. Under these circumstances, we strove to expand profit by driving forward profit-oriented initiatives, resulting in an increase in net sales and operating profit over last year. This shows that measures to ensure permeation of the idea of emphasizing quality over quantity after the global financial crisis were successful.

Yaskawa worked to enhance its global structure to respond to increasing demands in growing markets outside Japan. We drove efforts such as establishing new sales and service centers in China and other Asian countries and improving efficiency by opening new facilities for our subsidiary in Europe. We are striving to establish a strong global position by enhancing our global structure, with a focus on Asia.

We are steadily pushing ahead efforts to strengthen relations with system integrators (SI) in order to expand sales in handling robots for the food, pharma, and cosmetics industries, which we have been focusing on in recent years. In 2011 we established the Kanto Robotics Center as a hub for the forefront of cutting-edge robotics where visitors can see and touch robots in action. The center more than fulfilled its purpose and has received high acclaim from SIs and end-users alike. In the future we plan to establish more centers like this one across the globe, in the hopes that more people will feel a more intimate connection to robots and consider using them.

Endeavoring to expand the application of robots into new fields, in fiscal 2012 we focused efforts on the biomedical field. Although the market is still young and we do not anticipate significant results overnight, we have exhaustively approached research facilities of universities, hospitals, and drug manufacturers both within and outside of Japan to identify market needs, and are driving product development tailored to the market through the information and know-how we have obtained. And while developing the market, we are simultaneously making steady headway on preparations to turn it into a new core business.

Robotic system for preprocessing operations used in the biomedical field

Outlook

For fiscal 2013 we anticipate that demand in the automotive market will remain steady and the LCD market will recover. To meet growing demand, we are enhancing our sales structure in this segment, with a focus on markets outside of Japan that continue to expand. Our service structure will also be enhanced to ensure the satisfaction of customers around the world who use our robotics. Robot Centers where SIs and end-users alike can see robots in action and consider using them have been established in the US, Germany, and Sweden, as well as Shanghai, China and Saitama, Japan. In FY2013 we plan to open centers in Aichi, Japan and Chengdu, China as well as Thailand and Indonesia.

In Japan we will begin full-scale reconstruction of the main plant of our robotics business at Yahata-nishi Plant in Kitakyushu. Once the plant is operational it will strengthen our development and production capabilities and greatly increase automated production. We also plan to open Yaskawa Robotics Center on the premises to support sales offices within and outside of Japan.

In recent years demand for robots has seen a sharp and sudden increase in a wide range of industries in China. The Chinese market is expected to continue growing, and in order to create a production structure that meets local market demands, in May 2013 we started producing robots in Changzhou (Jiangsu Province, China) in accordance with our "production at the point of demand" philosophy. In the future we will operate our robotics business leveraging this dual-site production structure to the fullest extent.

In terms of products, to meet customer needs with higher value-added products, in fiscal 2013 we are launching new models of our manipulators and controllers used in automotive and general industrial robots and in semiconductor manufacturing robots.

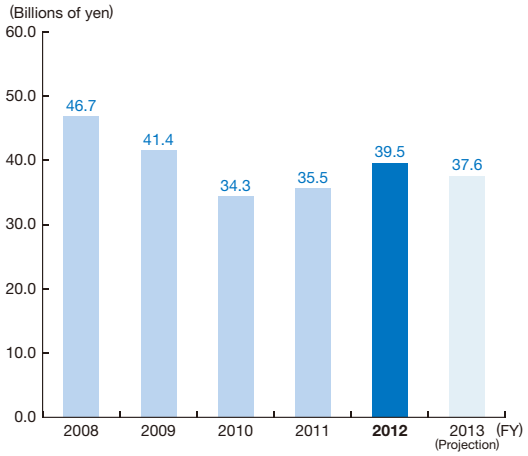
Last year we began technological development of biomedical robots, and we are now working to start full-scale sales and developing it into a new business.

And we are continuously developing our core technologies to maintain and strengthen competitiveness over the mid, long-term.

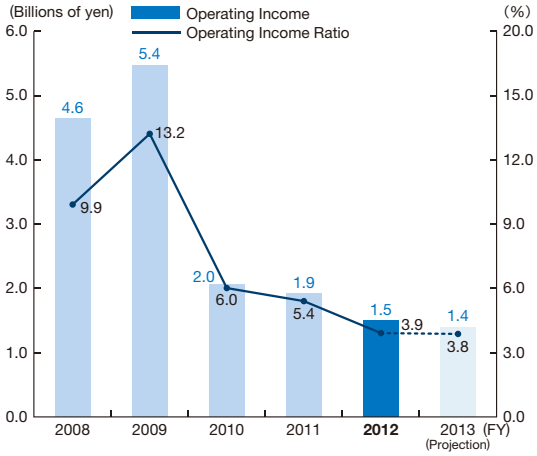
New robotics plant opened in China (Changzhou, Jiangsu Province)
Yaskawa (China) Robotics Co., Ltd.

System Engineering

Net Sales
¥ 39.5 billion



Operating Income
¥ 1.5 billion



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Business Overview

The major fields for which the System Engineering segment provides solutions are large-scale plant facilities used in steel plants and water treatment plants, where stable operations is an absolute requirement, as well as large-scale crane facilities. We are involved in projects from the facility planning stage, provide support throughout each facility's life cycle, and offer everything from technical proposals to after-sales service. This has earned us an excellent reputation for reliability.

This segment is comprised of five businesses: Steel Plants, Social Systems, Environment & Energy, Electrical Power, and Industrial Electronics.

The main market of our Steel Plants business is the steel industry. Our products and technology are used in every blast furnace operating in Japan. We provide advanced systems that leverage our drive technology and capabilities to build highly reliable systems—some of our company's greatest strengths.

Our Social Systems business provides infrastructure systems such as water treatment technologies. We develop technology to provide solutions to challenges such as water circulation, energy conservation, and disaster prevention, while using our technological expertise cultivated over the years to take on new challenges such as reducing sludge volume. This business unit also handles mega-solar systems, hybrid electrical generation systems that combine solar and wind power, and energy management systems, among others.

The System Engineering segment also includes our Environment & Energy business, which mainly handles large-scale wind power equipment; Electrical Power business, which handles devices such as pole-mounted gas-insulated switchgears; and Industrial Electronics business which deals with crane equipment. The segment's technologies are used in a wide range of industries and operates worldwide armed with our highly energy efficient, medium-voltage drive devices.

Review of FY2012 Operations

In fiscal 2012, the Japanese economy was expected to see an upturn as full-scale recovery from the Great East Japan Earthquake drove domestic demand. Unfortunately, due to effects from the economic slowdown in Europe and China, the economy did not recover. This segment, and the Social Systems business in particular, was negatively impacted by this adverse business environment. Despite this, we drove efforts to develop new applications and new customers for our medium-voltage drives, and the segment achieved an increase in sales, but suffered a loss in profit compared to the previous year.

Following the earthquake, however, further emphasis began to be placed on conserving energy and using renewable energy. This trend led to a steady increase in orders for solar and wind power products and systems—one of our main focuses.

In our Steel Plant business, we decreased construction time, enhanced operability, and improved ease of maintenance in our renovations of large-scale investment properties such as blast furnace equipment, new constructions of continuous casting facilities, and other such projects. We executed a project to improve efficiency and add advanced production equipment to replace deteriorated raw materials facilities used in the upstream process of steelmaking. The new facilities were more reliable, easier to maintain, and contributed to conserving energy as well.

In our Social Systems business, we assisted in the integration of energy-saving, efficient, and effective facilities by delivering advanced monitoring and control systems, and remote monitoring and control equipment such as our water delivery prediction system used in waterworks facilities. In the area of renewable energy, local production and consumption of energy initiatives have begun in Japan, and we involved in the Kitakyushu Smart Community Creation Project, through which we are actively engaged in the demonstration of FEMS and CEMS* systems.

We have also begun production of medium-voltage drive devices at our Oak Creak Plant (in Wisconsin, USA) as part of our efforts to expand the global market.

In terms to products, we developed a Smart Shelter, which is an energy management system for disaster aid centers, notably evacuation facilities. It is composed of environment & energy components which include a solar power system and storage cell system, in addition to a system to optimally control those components. It also includes an emergency power supply feature. We have also developed a sludge reduction system that solubilizes sludge at a high rate of efficiency. This makes it possible to create optimal operating conditions to maintain the quality of treated water. In our Electrical Power business, we developed an environmentally friendlier automatic air-insulated switchgear for distribution lines to replace the SF6 gas-insulated, arc-extinguishing system of our previous switchgear model. And in our Environment & Energy business we added a liquid-cooled converter with superior environmental resistance to our Enewin Series of generators for large-scale wind power systems.

* FEMS : Factory Energy Management System
CEMS : Community Energy Management System

Outlook

In fiscal 2013 spending on public works projects in Japan is expected to increase, as is demand for medium-voltage drives in China, the US, and South East Asia. The steel industry is expected to reduce domestic investment, and turn to aggressive investment in overseas markets, and energy conservation and environmental measures.

Under these circumstances, we will strive to boost share and increase orders in our Steel Plant business by proposing system solutions in new areas leveraging our medium-voltage drive technology and new products, while keeping an eye on capital investment trends of steel companies. We will also take steps toward building a global sales and production structure while paying close attention to Japanese steel company's investments in emerging countries.

We will accelerate expanding our Social Systems business in several areas including: mega-solar systems, solar and wind power hybrid systems, and energy management systems. Capital investment focusing on renovations to improve environmental performance is expected to keep growing. In response to this and the upward trend of investing in advanced treatment, anti-flooding measures, resource recovery, energy measures, and so on, we plan to expand this business from its focus on the public sector into the private sector and overseas markets.

In our Environment & Energy business, we are enhancing strategic products—with particular focus on our Enewin Series of products for large-scale wind power systems—and raising brand awareness in the high growth potential country of China, which we expect to lead to more product orders.

As for our medium-voltage drives, we plan to increase orders for our core product FSDrive-MV1000 by developing new customers and entering new fields, and further enhancing our production structure in China and the US.

In the System Engineering segment, we will expand product and technology applications toward the development of new applications and the expansion of shares, in order to expand our business fields and secure profits. We will also enhance our sales, development, and production capabilities to support the business and advance product development, anticipating future needs and global implementation of each business.

Super energy-saving medium-voltage AC drive
FSDrive-MV1000
(2 kV, 3 kV, 4 kV, 6 kV, 11 kV class)

Information Technologies

Business Overview

The Information Technologies segment comprises all business operations of Yaskawa Information Systems and YE Data, which are two of the listed companies in the Yaskawa Group, together with operations in information-related technological development conducted by Yaskawa Electric.

The IT segment, in which the two listed subsidiaries play the central part, pursues group synergy through close coordination with each individual player bringing its own unique qualities to the mix so as to create new business opportunities in information technology.

Note: Starting the fiscal year ending March 2014, the Information Technologies segment will be included in Other.

Yaskawa Information Systems Corporation

Information processing services

In fiscal 2012, we saw an increased investment in the telecommunications field brought about in part by the proliferation of smartphones and an upward trend in information technologies investment in non-manufacturing industries. This was offset by the strong resistance against investing in IT that remains in the manufacturing industry due to its uncertain future. In the final year of our midterm business plan Renovate 21, we strove to grow our business and defeat the competition by focusing on growth areas and pursuing customer value, while endeavoring to secure a stable, profitable structure by implementing a complete transformation of our business lines to provide higher added value.

In particular, we worked to strengthen our business base in new and growing areas. In the telecommunications and environment & energy fields we saw a dramatic increase in business, and in the medical field we developed new regions and customers, and received orders for large-scale projects.

These efforts resulted in increased sales over the previous year, but lower profits due to increased costs from large-scale projects and drop in profitability due to changing our sales mix.

As for the state of the information service industry in FY2013, the smart-mobile market continues to grow at a high level and there are signs that corporate investment in information technologies will pick up due rising business confidence. New technologies like cloud and big data show potential for growth, as does the healthcare market. Unfortunately, growth prospects for the market as a whole remain low, and the present adverse business environment is expected to continue.

The Yaskawa Information Systems Group has formulated a new midterm business plan "Renaissance 21" which spans FY2013 through 2015. For the first year of the plan we will strengthen our business base by completing the transformation of our cost structure and aggressively driving strategic businesses in accordance with the restructuring of our business lines, and develop a solid growth plan.

YE Data Inc.

Information-related products and services (Optomechatronics and information-and-telecommunications)

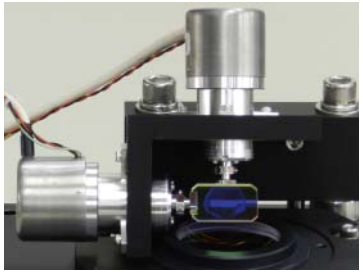
In fiscal 2012 YE Data Group aimed to complete the ongoing restructuring of our business lines in order to make optomechatronics a core business, and worked to secure a solid profit structure in the fields of galvano-scanner systems and robotics systems. Unfortunately, factors including the temporary slump in laser marking device sales from LCD and touch panel industries holding back on capital investment and the shrink in demand for information and telecommunications services, such as data recovery and photo kiosk terminals, led to a decrease in sales from the previous year. We reported a consolidated loss for the 2nd year in row.

In fiscal 2013 YE Data Group plans to complete the ongoing restructuring of group's businesses, achieve a surplus, and secure a solid profit structure for the future. Specific efforts to achieve this are as follows:

1) Define our core businesses, improve quality, and increase sales volume.
2) Secure revenue by enhancing Quality, Costs, and Delivery time.
3) Build a quality assurance system to meet the demands of increased sales volume.

In addition to the above, we are working to improve management efficiency and enhance alignment between technical and sales teams in our core Optomechatronics business, while strengthening measures to decrease special expenses such as reducing directors' compensations from April 2013.

CDMA 1X packet communications adaptor MMLink-1X



Fully digital galvano-scanner MIRAMOTION (high-speed specifications)

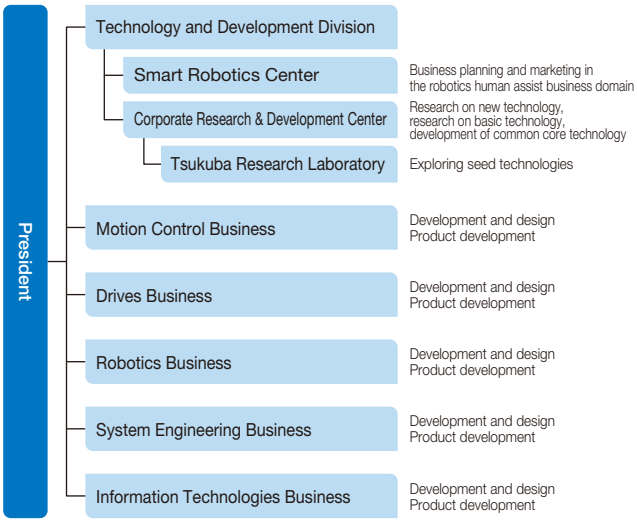
Technology Development and Intellectual Property

Technology Development

Policy and Items of Research and Development

The Yaskawa Group is working to strengthen its responsiveness to the global market in such existing business fields as motion control and robotics and to harness the success of these efforts in the development of new products. We are additionally pursuing research and development (R&D) that will contribute to society well into the future, including the development of technologies and products in the "Environmental & Energy" business domain, which includes such products as renewable energy systems and on-board electric products, as well as technologies and products that help humans and robots to coexist in the "Robotics Human Assist" business domain.

Research and Development Structure



FY2012 Achievements and Topics

Yaskawa Electric has been advocating a mechatronics paradigm shift based on new power devices and their application technology. As part of our efforts, we have developed a next-generation high-power density (25 times that of our current model) drive system. The device uses SiC (silicon carbide), a compound used in new power devices which has garnered much attention. In the environment & energy field, we developed a next generation power conditioner equipped with the world's first GaN (gallium nitride) power semiconductor module. This innovation has greatly improved efficiency and is more compact compared to our current model.

SiC next generation drive system

GaN based power conditioner

Intellectual Property

Intellectual Property Strategy

Yaskawa Electric respects third-party intellectual property while using our own intellectual property to actively protect our products, giving them an edge on the market.

Intellectual Property Management Strategies

Within the framework of a strategic corporate management trinity that encompasses business, R&D and intellectual property strategies, we are shifting the focus of our activities regarding intellectual property rights from quantity to quality. At the same time, we have been implementing a proactive patent cycle constituting the creation, protection and utilization of our intellectual property.

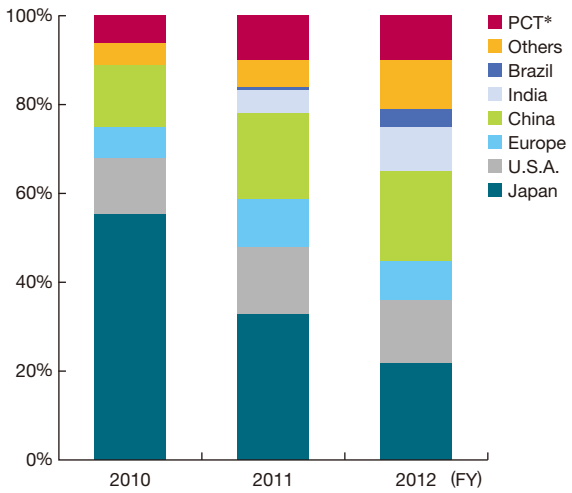
Intellectual Property Activities

We pursue proactive patent activities closely linked to R&D by collaborating with the intellectual property division, which provides company-wide supervision, and with the pro-patents assigned to the R&D division and other business divisions.

Status of Intellectual Property Rights

We promote activities that protect our products around the world using intellectual property rights. We are reinforcing our patent application and rights acquisition activities in emerging nations in order to secure the superiority of our own products there, particularly as they are becoming increasingly important as future production sites and markets.

• Patent application rates by country



* Filed an international application under the Patent Cooperation Treaty

Message from the Director in Charge of CSR

The Yaskawa Electric Group conducts business under an open policy, with a constant eye on how to further contribute to the world.

Toshihiro Sawa
Representative Director
Corporate Executive Vice President

In 2015 Yaskawa Electric will celebrate 100 years. One of the things that has kept us in business for so long is the support of the communities we serve. It is said that the average lifespan of a company is around 30 years. For over three times that length we have been in business, responding to the changes in society and contributing to society through business.

This is not to say we haven't faced crises during that time. The oil crises of the late 70s was an incredibly hard time for our company. We returned to our roots, and laid down guiding principles based on the spirit our company was founded on. These guiding principles began with the words "Always put the customer first." At the time I equated "customer" or end-user with "business client", but as my scope of business responsibility expanded, I became acutely aware that we are sustained by the various stakeholders around us. It goes without saying that the end-customers are important, but our suppliers who work with us to boost customer satisfaction are equally essential to our business. And although it is the capital provided by our shareholders and financial institutions that allows us to conduct business activities, we need to earn the trust of the society to receive investment and financing. To earn this trust we need to do more than just "do business." We also need to cultivate a workforce that can contribute to the community. Every employee in the Yaskawa Group is aware of their responsibility to society, considers the fulfillment of that responsibility part of the CSR, and works together to think about how they can contribute to society as a company. For over 30 years every employee has been required to repeat the abovementioned guiding principles on a daily basis, and now that we are approaching 100 years of being in business, it is an excellent opportunity for the entire Group to renew our understanding of its true meaning.

One important way we believe we can contribute to society as a company is to further expand corporate diversity. Since we are an industrial electronics manufacturer, there are not many women who apply to work with us. Promoting the contribution of female employees is an issue as well. Presently, we are working to expand business in the environment & energy, as well as the medical, social services, and long-term care fields, but in order to do this we must endeavor to avoid stereotypes and consider the feelings of the people who work on the frontline of those fields.

In management, the views of the external director and external auditor provide us with different perspectives and ideas, and are a big advantage in managerial decision-making process. Our commitment to incorporating outside perspectives extends beyond just management. Through providing an open innovation platform we actively incorporate such perspectives in the areas of technology and product development as well. In this way we collaborate with individuals outside our company to meet diverse global market needs, while keeping our core technologies within the company.

We also feel it is important to be open to the communities we serve. Yaskawa Electric's robot plants and R&D centers are on the list of industry tour stops promoted by Kitakyushu, and we welcome thousands of visitors each year. It is our hope that by exposing children to cutting-edge technology like robotics, we will foster dreams and help cultivate the next generation of creators.

Moreover, in addition to delivering solutions to environment & energy problems in the fields of energy conservation and creation through our business activities, our Group also works aggressively to reduce environmental impact of the business activities themselves as well as in product design.

In the following pages this report will describe our relationship with the various stakeholders that support the Yaskawa Electric Group on a daily basis so that we can persist as a company, as well as our management structure and corporate environmental efforts. Through these comprehensive CSR initiatives, we will continue to offer higher added value to society while improving corporate value. We look forward to your continued support and guidance.

Management Principles and Corporate Activity Standards

Yaskawa Electric will celebrate the 100th anniversary of the foundation in 2015. We are grateful to all those who have provided support over the years, including customers, suppliers, shareholders and investors, the local community, employees, and many others. The present-day idea of CSR (Corporate Social Responsibility) is inherent in our corporate DNA, as our management philosophy advocates our company's mission is to contribute to the progress of society and the welfare of mankind through business performance. We aspire to become a corporation with global competitiveness and a brand that meets the expectations of various stakeholders on a long-term perspective by providing solutions suited to the changes of society and the industrial structure.

Management Principles

Our company's mission is to contribute to the evolution of society and the welfare of mankind through the performance of its business. In order to achieve this mission, we particularly affirm the following three principles and will endeavor to realize them.

1. To emphasize the importance of quality of products and constantly develop and improve technologies in which we can take pride throughout the world.
2. To improve the efficiency of operation and secure profits necessary for the survival and continued growth of the company.
3. To endeavor to keep a market-oriented attitude, to meet the needs of the market and do our utmost to serve our customers in the best way possible.

Yaskawa Group Corporate Activity Standards

Because our Management Principles require that we contribute to the development of society and the welfare of mankind through our business performance, as well as seek to build a solid and trustful relationship with society by fully recognizing corporate citizenship and operating a conscientious and fair business, we, the members of the Yaskawa Group, respect human rights and conduct ourselves in a socially responsible manner as we work to build a sustainable society, observing both the spirit and the letter of all laws and international rules applying to our activities in Japan and abroad in accordance with the following ten principles.

1. We, by the development and provision of socially beneficial products and services in a safe and environmentally friendly manner, shall contribute to the improvement of people's lives and to economic and social development, taking all necessary measures to protect personal data and customer information.
2. We shall work to protect the environment proactively with a broad perspective in our overall business activities.
3. We shall engage in communication not only with shareholders, but also with members of society at large, including active and fair disclosure of corporate information, making every effort to prevent insider trading.
4. As "a good corporate citizen," we shall actively engage in philanthropic activities, and other activities of social benefit.
5. We shall respect diversity, individuality and differences of the employees, to secure safe and comfortable workplaces, and to ensure the mental and physical well-being of the employees.
6. We shall observe laws and regulations applying to our overseas activities, respect the local culture and customs, and strive to manage our overseas activities in such a way as to promote and contribute to the development of local communities.
7. We shall operate businesses based on fair, transparent, and free competition and sound trade, which strictly observe all laws and never violate social norms.
8. We shall reject all contacts with organizations involved in activities in violation of the law or accepted standards of responsible social behavior.
9. Top management shall assume the responsibility for realizing the spirit of these standards and for taking the initiative in all necessary actions to raise awareness in the group, inform its business partners of this responsibility, establish effective internal systems and ensure thoroughgoing corporate ethics.
10. In the case of incidents contrary to the principles of these standards, top management must work to solve the problems caused by these incidents, investigate the cause for the incident, and develop reforms to prevent recurrence. After the prompt public disclosure of information regarding the incident, responsibility for the event and its effects should be clarified and disciplinary action should be taken, including the highest levels of management where necessary.

Note: On the establishment of the Yaskawa Group Corporate Activity Standards

In 1997, Yaskawa Electric composed the Yaskawa Electric Corporate Activity Standards, which declared our intention to manage our business based on legal and ethical compliance as a member of society. Subsequently, as we realized the need for establishing a compliance program, we made a number of revisions to the standards in order to increase awareness and furthermore took initiatives to improve compliance.

The community and the outside world in recent years increasingly view and judge enterprises in terms of their entire corporate groups, and for its part, Yaskawa Electric has espoused consolidated group management and global expansion.

To meet the needs of these new times, we have redesigned the Corporate Activity Standards. Since March 21, 2010, these standards no longer apply just to the parent company Yaskawa Electric, but to our entire Group, including subsidiaries in Japan and abroad.

We engage in activities to strengthen compliance and enhance corporate governance in order to earn greater trust from all of our stakeholders while also maximizing shareholder value by improving the efficiency and soundness of management.

We are striving to improve management transparency and achieve fair and timely information disclosure to shareholders and investors by means of financial results briefings, IR meetings, our company website, and other avenues.

Management System

Directors and the Board of Directors

We select internal directors and suitable external directors with relevant knowledge for our corporate management system, which is concerned with managerial decision-making as well as execution and oversight of operations. In this way, we enable rational and efficient decision-making.

Since June 2012, the Yaskawa Electric Board of Directors has been made up of seven members - six internal directors and one external director. Their term of office has been set at one year in order to create a system capable of responding promptly to a rapidly changing business environment. In addition to regular meetings, the Board of Directors may hold extraordinary meetings as necessary, at which they decide matters prescribed by statute and important management issues as well as conduct sequential regulatory oversight of business operations.

As of June 21, 2013, we appointed one external director (Yoshiki Akita). External directors work from an objective perspective, independent of those in top management who execute the business of the company, while also making use of their own experience as managers. This guarantees the legality of decisions regarding company management and decision-making regarding the execution of business.

• External Director

Name	Present Position	Reason for Appointment
Yoshiki Akita	Chairman and Representative Director, Layers Consulting Co., Ltd.	Possessing a wealth of knowledge and experience as a certified public accountant and as representative director of a consulting firm, he is also in an independent and objective position with regard to management. We therefore consider that he has a great deal to contribute to the management of Yaskawa Electric as an external director. He is not an operating officer of any Yaskawa Electric main suppliers or main shareholders, and we judge that he is unlikely to have any conflict of interest with respect to our general shareholders. We have therefore notified the Tokyo Stock Exchange that he is an independent executive as defined by the Exchange.

Executive Officer System and Management Committee

We have adopted an Executive Officer System to accelerate the execution of business operations and improve efficiency of our management system.

We have also formed a Management Committee comprised of executive directors and executive officers. The committee deliberates on matters to be resolved by the Board that require advanced discussion and on important decision-making issues regarding the execution of business.

As a rule the Management Committee holds regular meetings twice a month in addition to extraordinary meetings as necessary in order to ensure a flexible and expeditious system for executing business operations.

The Board of Auditors and Auditors

The Board of Auditors is made up of four members, two full-time internal auditors and two external auditors (Makoto Ishimaru and Kazumasa Tatsumi).

Auditors attend meetings of the Board of Directors, the Management Committee, and other important company meetings, and read over important documents in order to collect information. Auditors also create and apply oversight mechanisms for the Board of Auditors, and oversee the Board of Director's decisions on important managerial and legal issues as well as of its execution of business operations.

• External Auditors

Name	Present Position	Reason for Appointment
Makoto Ishimaru	Director and Managing Corporate Officer, Krosaki Harima Corporation	He has gained considerable experience, achievements, and knowledge in his capacity as general manager of the administration division of a business corporation, and we believe that these will be utilized to good effect in strengthening the Yaskawa Electric auditing system. He is not an operating officer of any Yaskawa Electric main suppliers or main shareholders, and we judge that he is unlikely to have any conflict of interest with respect to our general shareholders. We have therefore notified the Tokyo Stock Exchange that he is an independent executive as defined by the Exchange.
Kazumasa Tatsumi	Attorney and President, Kazumasa Tatsumi Law Office	He has acquired specialized knowledge and experience as a lawyer, and we believe that these will be utilized to good effect in strengthening the Yaskawa Electric auditing system. He is not an operating officer of any Yaskawa Electric main suppliers or main shareholders, and we judge that he is unlikely to have any conflict of interest with respect to our general shareholders. We have therefore notified the Tokyo Stock Exchange that he is an independent executive as defined by the Exchange.

Internal Control System

We have charged the board of directors, management committee, and other bodies with carrying out appropriate administration of business operations to ensure the company's business runs properly and efficiently. In addition, the board of directors issues resolutions regarding basic policy for improving and maintaining internal control systems including the articles of incorporation, information disclosure policy, risk management systems, division of duties, operational authority, and group company management, and revises them as needed.

The Yaskawa Group has also acted to strengthen internal control systems by establishing the Yaskawa Group Corporate Activity Standards, and ensuring its wide dissemination throughout the group.

Compliance Systems

We have defined norms for corporate actions by formulating the Corporate Charter and the Yaskawa Group Corporate Activity Standards, and taken action to ensure compliance by Yaskawa Electric and every Group company, as well as for deploying and promoting educational and statutory compliance systems. We have also established a Compliance Committee to carry out company-wide deployment and promotion of measures to ensure compliance of the Yaskawa Group Corporate Activity Standards, educating employees on the Standards, and reinforcing the legal compliance system. We have further instituted an in-house reporting (whistle-blowing) system with a "Compliance Emergency Number" internal alert system that enables employees of Yaskawa Electric, subsidiaries, and affiliates to report violations of compliance rules to an in-house contact point or an outside third party organization.

For compliance education, we have implemented such measures as distributing a pamphlet called Compliance Guidelines in order to heighten awareness of compliance activities and ensure they are carried out. We also conduct questionnaire surveys regarding compliance and take steps to raise the level of compliance awareness, which include identifying issues and conducting improvements.

Risk Management Systems

We have established the Risk Management Committee to formulate and promote policies related to risk management and to provide follow-up support for the management system, as well as to raise awareness of and carry out education in risk management. This Committee sets forth explicit basic policies for day-to-day emergency preparedness and for when crisis occur, builds company-wide risk management systems, and conducts company-wide risk management in accordance with "Basic Regulations for Risk Management".

Director and Auditor Compensation

The cap on director compensation was decided at the 96th Regular General Meeting of Shareholders held on June 19, 2012, as the total of the fixed amount (a) shown below and the profit-linked amount (b). (This does not include employee wages.)

(a) Annual amount up to 430 million yen
Directors (external directors excluded) bear the responsibility for increasing corporate value, and all the directors are therefore paid certain amounts according to their performance evaluation and grade. External directors bear the responsibility for oversight of the execution of duties, and they are therefore paid a fixed amount that is determined in advance.

(b) One percent or less of consolidated net income for previous fiscal year
To clearly establish a link with consolidated business results, directors (excluding external directors) are to be paid up to 1.0% of consolidated net income for the fiscal year prior to that of the General Meeting of Shareholders at which the director was appointed or reappointed. This is not to be paid to external directors.

The amount of compensation for auditors was decided at the 82nd General Meeting of Shareholders held on June 18, 1998 to not exceed 6 million yen per month.

• Compensation Paid to Directors and Auditors in FY2012

Classification	Number of Officers	Compensation
Directors (external directors excluded)	14	351 million yen
Auditors (external auditors excluded)	3	44 million yen
External Officers	5	19 million yen

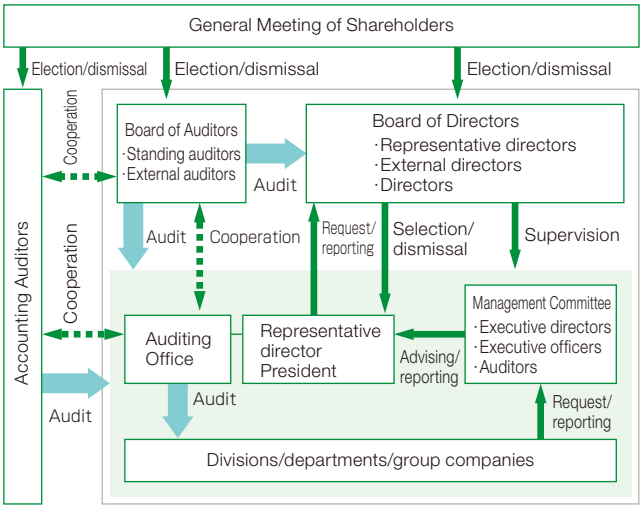
In-House System for Information Disclosure

We have established the Yaskawa Group Corporate Activity Standards, which state our basic policies. These policies are 1) We shall engage in communication not only with shareholders, but also with members of society at large, including active and fair disclosure of corporate information, making every effort to prevent insider trading, and 2) We shall operate businesses based on fair, transparent, and free competition and sound trade, which strictly observe all laws and never violate social norms.

Based on these policies, we maintain a timely and accurate understanding of company operations (such as facts about decisions made and actual events, information about financial results) within every responsible division, including those of subsidiaries, and we strive to conduct timely and appropriate information disclosure with regard to investors, various business partners, and financial instrument exchanges.

Handling of corporate information is carried out in accordance with the Securities Listing Regulations set forth by the Tokyo Stock Exchange, upon obtaining approval from parties with the authority to approve the release, based on in-house regulations.

Corporate Govemance System



Board of Directors and Corporate Auditors

As of June 18, 2013

Directors

Noboru Usami
Representative Director
Senior Executive Vice President

Junji Tsuda
Representative Director
Chairman of the Board
President

Toshihiro Sawa
Representative Director
Corporate Executive Vice President

Hiroshi Ogasawara
Director
Corporate Senior
Vice President

Shuji Murakami
Director
Corporate Vice President

Yuji Nakayama
Director
Corporate Vice President

Yoshiki Akita
External Director

Auditors

Manabu Ichikawa
Auditor

Naoto Shimozono
Auditor

Makoto Ishimaru
External Auditor

Kazumasa Tatsumi
External Auditor

Corporate Vice Presidents

Hiroyuki Ougi
Corporate Senior
Vice President

Hideki Goto
Corporate Vice President

Osamu Motomatsu
Corporate Vice President

Yoshikatsu Minami
Corporate Vice President

Shigeto Yanase
Corporate Vice President

Koichi Takamiya
Corporate Vice President

Konosuke Noda
Corporate Vice President

Michihiko Zenke
Corporate Vice President

Masahiro Ogawa
Corporate Vice President

Kazuaki Yoshida
Corporate Vice President

Takeshi Ikuyama
Corporate Vice President

We aim for improving customer satisfaction by putting quality first and assuring safety and security.

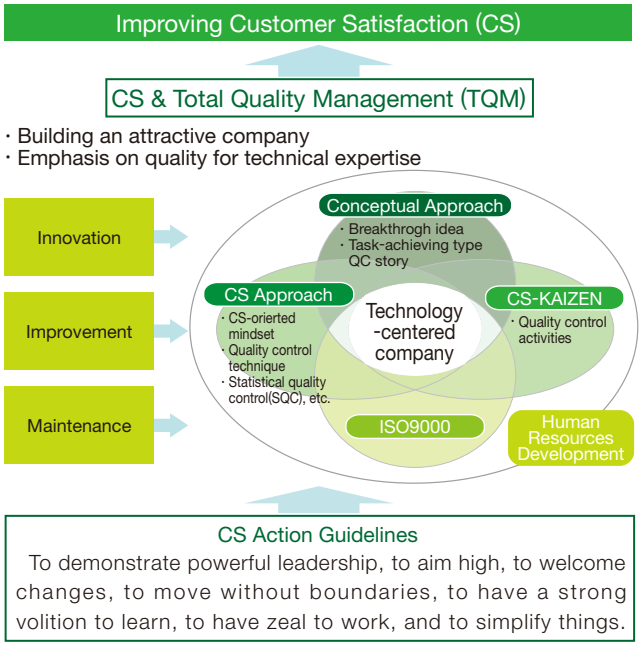
One of the mainstays of our management philosophy is emphasis on quality. This was originated in the founder's beliefs, and the tradition continues today. As a polar precept, it is stipulated in the employee code of conduct. The Yaskawa Group aims to achieve total customer satisfaction (CS) by offering not only the quality of products but also quality of service and solutions tailored to the customer's needs.

Programs for Delivering Satisfaction

Practicing Management Based on CS Principles

Yaskawa Electric aims for the improvement of our corporate value through management based on CS principles. This will lead to the greater emphasis on prioritizing quality and result in the customer being placed first. We are also holding interactive gatherings between executives and employees, among other such measures, to disseminate the CS philosophy.

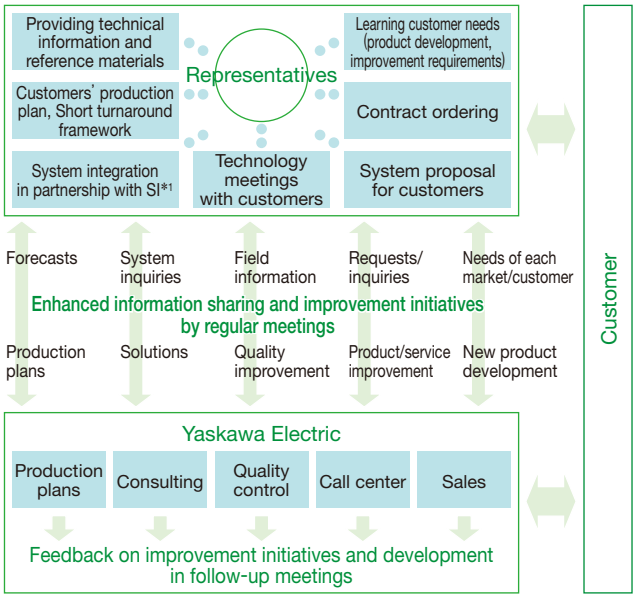
• CS-based Management and Quality Improvement



Taking Customers' Opinions into Account in Doing Business

Yaskawa Electric believes that sharing information with our customers in partnership with our representatives and having our salespeople hear customer opinions directly are very useful, since customer opinions can help us improve our business activities. We also hold periodic meetings (twice a year) with our representatives to exchange views, while our business divisions hold follow-up meetings once a month, as we seek to step up our initiatives for improvement and make further enhancements.

• Information Sharing and Improvement Initiatives in Partnership with Representatives

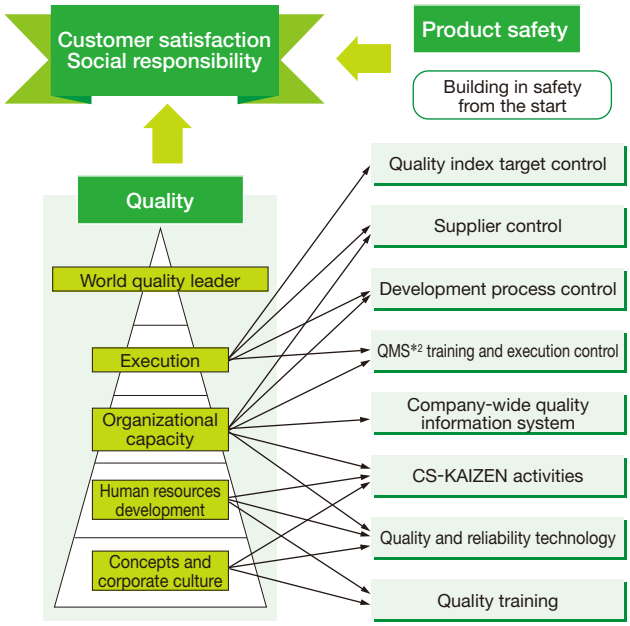


＊1 System Integrators

Initiatives to Ensure Safe Use

Developing Quality First Awareness

We fulfill our social responsibility as we develop a culture and capacity for quality and enhance customer satisfaction. In particular, we aim to increase our capacity for quality based on a foundation of greater quality improvement initiatives and stronger human resources development, and to build quality into our products through an emphasis on process control.



＊2 Quality Management System

CS-KAIZEN Activities

We promote a corporate culture of making constant improvements on a daily basis by working on themes common to our operations with the primary objective of reinforcing our ability to make improvements. At the same time, we continue to revitalize the development of our human resources as well as communications. Our ultimate goal in conducting CS-KAIZEN activities is the improvement of Customer Satisfaction (CS) and corporate values.

A total of six themes were presented at the CS-KAIZEN competition held in the first half of fiscal 2013: three from the production division, one from the quality control division, one from the technology division and one from the administrative division. The winning teams will be entered in a competition outside the company.

Heidi Circle from TOTO LTD. was also invited to the competition. They gave a talk filled with valuable information on a subject common to both our companies—mounting electronic components.

In fiscal 2013 we set as our priority measures to strengthen involvement of managers by implementing managerial QC training programs and regular reviews by managers, and enhancing and verifying their execution capabilities by expanding QC inspections and identifying issues before and after the fact.

Product Safety

In order to make sure that our customers use our products with confidence, the most important thing for us is product safety assurance from the very beginning. This is why at the product development stage we perform risk assessments to make sure that products are sufficiently safe, make our products compliant with international standards, verify them and hold safety inspection meetings, among other initiatives.

We also respond immediately in case of trouble and have a global emergency communications network in place.

We also do internal training and provide activities to raise awareness of product liability. Our Buds of PL improvement initiative* is a continuous activity that aims to bring an awareness of problems to internal and external safety information and constantly pursue high targets.

* Buds of PL (product liability) is a program for fostering a culture that uses near-accidents, etc., to nip product liability problems in the bud (i.e., develop a product safety culture) and thereby fulfill our product responsibility; it is also a general name for all safety improvement initiatives.
The basis of these efforts is to take quality problems that occur in the market, as well as those moments when one becomes aware of a safety problem in one's day-to-day activities, provide them to upstream processes as feedback, and thereby work to achieve safer products and a safer work environment in a cycle of continuous improvement.

Quality Improvement

Customer information about nonconformities is collected and analyzed online by our Company-Wide Field Quality Information System and reflected in quality improvement initiatives. In particular, this process leads to cross-organizational deployment to prevent recurrence and initiatives to prevent problems during new product development.

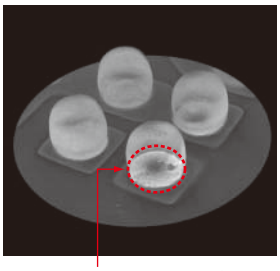
3D X-ray CT Equipment

We have installed a 3d X-ray CT system in our Reliability Technology Center capable of non-destructively observing, examining, and measuring the internal structure of substances and materials such as the solder connections of electronic components and internal cracks in die-cast parts. This has improved our analytical capabilities and boosted efficiency.

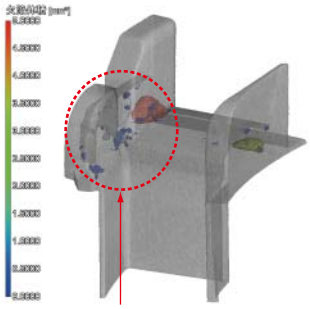
For substrates and electronic components

For casted, molded components

• Illustration of measurement



Faulty solder connection of electronic component



Defect in injection molding component

User School

For users to get the most performance out of our products and use them safely, the most important thing is basic knowledge. We offer Motion Control School for customers of our AC drive and servo (general-purpose) products. We teach two ways: the school-like training in which an instructor explains a product directly; and e-learning, where customers learn over the Internet. Details are available at our e-Mechatronics site (http://www.emechatronics.com/).

Yaskawa Motoman Engineering Corporation moreover offers Robot School, teaching operation and maintenance of robots and robotic related products.

Test Runs and Service

Adjustments and test runs by our trained engineers are available to check the compatibility of the customer's equipment with our products as well as to improve overall machine/equipment performance. The entire Yaskawa Group renders support on a global basis for preventive maintenance and recovery at the time of any failure.

After the Production Stoppage

In principle, repair parts for discontinued products are not distributed. However, long term maintenance for customer's equipment can be arranged in cooperation with Yaskawa Group companies and our affiliated service companies.

We build better partnerships and fulfill our corporate social responsibility together with our suppliers.

Procurement Policy

We continually strive to improve our procurement system to ensure that the products we purchase meet our standards of quality, cost, and delivery, as well as to build relationships of mutual trust, cooperation, and true mutual benefit with our suppliers.

Open Door Policy

We provide equal and fair trading opportunities based on free competition in transactions by opening widely the door to the world in search of new suppliers.

Green Procurement

We formulated the Green Procurement Guidelines for the purpose of procuring materials with low environmental impact, and we work with our suppliers to conserve the global environment. We also closely control hazardous substances following our environmental management system.

Fair Trade

We practice fair trade founded on a basic trade contract to ensure that both Yaskawa and our suppliers fulfill our respective social responsibility for compliance and environmental protection.

We select new suppliers based on an evaluation of the quality, price, delivery, management information and environmental requirements.

CSR-Based Procurement

Through fair trade that complies with corporate social responsibility (CSR) and the law, we work to build partnerships with our suppliers.

Compliance with EU REACH Regulation

In 2010 we issued a revised version of the Green Procurement Guidelines and updated the green procurement system in order to ensure compliance with the EU REACH regulation.

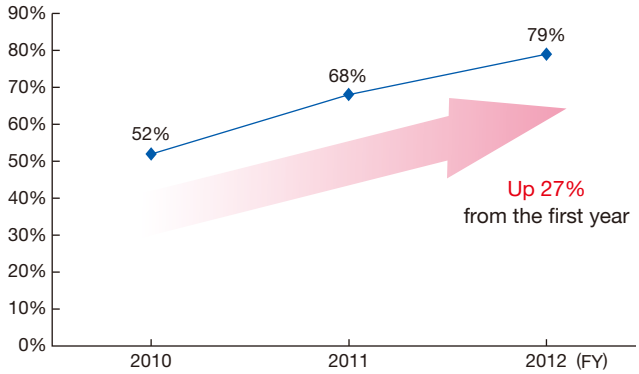
Furthermore, we have accelerated preparations, both inside and outside our company, for our new procurement system to accommodate EU REACH regulations by completing written agreements with our suppliers to cooperate on green procurement, in accordance with the new Green Procurement Guidelines.

A significantly high proportion of our suppliers—roughly 90%—of our suppliers responded to our hazardous substance survey request regarding their components and materials. (Cumulative amount since FY2010)

We ask our suppliers to respond to green procurement survey requests within one month of the request date. The graph to the right shows the transitions in the percentage of suppliers who respond within one month. Prompt response from suppliers enables us to comply with EU REACH regulations.

New substances are added to the EU REACH list as needed. By sharing information on revised or additional substances as soon as it is available, we ensure that both our company and our suppliers continue to comply with EU REACH regulations.

• Transitions in response rate within 1 month



Eco-Conscious Procurement

Joint efforts between Yaskawa and our suppliers to digitize all documents related to procurement has resulted in the reduction of paper volume used.

Thanks to our suppliers' understanding and cooperation, in FY2012 we reduced paper usage by digitizing nearly 93% of order forms and 94% of all receiving inspection notices.

We plan to further our digitization efforts to help conserve the environment by reducing the amount of paper we use.

Relations with Employees

Human resources are the key to achieving growth and evolution in a corporation. Therefore, human resource development is one of the major components essential to the growth of any company. Yaskawa is carrying out various projects to foster human resources and a corporate climate to take up the challenge. At the same time, we are committed to providing welfare benefits to employees, so they can focus and work to the best of their ability without any distractions. Our health and safety initiatives and health promotion efforts help to build a safe and comfortable place to work.

Policy and Activities for Employment

Yaskawa's employment policy aims to assign the right personnel in the right number in accordance with the structure and scale of the business operations of each company in the Yaskawa Group. We are trying to achieve the goal by exchanging personnel within the Group for enhancement of human resource. As the development of our business overseas accelerates, we are also making an effort to secure and foster global human resources.

Organization of Employees

• All-Group consolidated figure: Number of employees by business segment

(As of March 20, 2013)

Business Segments	Number of Employees*
Motion Control	4,368 [1,734]
Robotics	2,929 [679]
System Engineering	656 [271]
Information Technologies	914 [9]
Other	690 [465]
Corporate	826 [126]
Total	10,383 [3,284]

• Number of Yaskawa Electric employees only

(As of March 20, 2013)

Number of Employees*	Avg. Age
2,746 [741]	40.8
Avg. Number of Years in Employment	**Resignation Rate of After 3 Yrs of Work**
18.5	5.0%

* The annual average figures of the numbers of part-time employees, temporary staff and part-time employees on short-term contracts are indicated separately in the brackets.

Promoting Supportive Work Environment

Yaskawa Electric has a variety of programs that provide support in the workplace, so that all employees can fully make the most of their abilities, regardless of gender, disability, and nationality, and have both a good working life as well as a good family life. Our efforts to provide our employees with a comfortable work environment have been formally recognized, and we have been authorized to use the mark of the "Kurumin"* granted under the "Act for Advancement of Measures to Support Raising the Next Generation of Children."

* A national system of merit in which companies are recognized for meeting specific criteria in providing support to families raising children as part of a campaign to encourage a higher birthrate in Japan.

Employment Status of the Elderly, People with Disabilities, and Non-Japanese Employees

	FY2008	FY2009	FY2010	FY2011	FY2012
No. of employees rehired*1	106	164	199	239	246
People with disabilities employed (%)	1.62	1.75	1.85	1.65	2.15
No. of non-Japanese employees*2	14	16	14	19	18

*1 Number of regular employees and temporary contracted workers aged 60-64
*2 Regular employees and contract employees

Use of Parental Leave Program

	FY2008	FY2009	FY2010	FY2011	FY2012
No. of Females/Use Rate	3/100%	5/100%	2/100%	5/100%	5/83%
No. of Males	2	1	1	4	1

Average Amount of Paid Leave Taken per year

	FY2008	FY2009	FY2010	FY2011	FY2012
No. of days/person	12.44	8.69	12.30	12.81	12.44

Employee Family Communication Activities

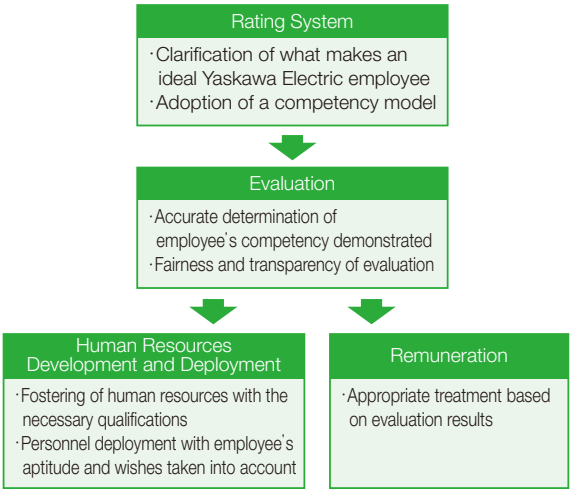
To promote work-life balance and the proper development of the next generation, each plant plans a number of events to bring families in touch with us and each other. Many employee families take part in each event, which lets us actively pursue communication not just with our employees but also their families.

In Yukuhashi:
Forest therapy tour

In Tokyo:
Tour of Kanto Robotics Center

Personnel System

Yaskawa's personnel system stresses action leading to concrete results and equitable treatment of employees while aiming at thorough implementation of a merit-based personnel system, dissemination of CS principles, and enhancement of employee satisfaction (ES). In an effort to establish a merit-based personnel system with an emphasis on process, we have adopted the concept of competency and revised our system to consist of a rating system, an evaluation system, a remuneration system, and a human resources development and deployment system based on a competency model.

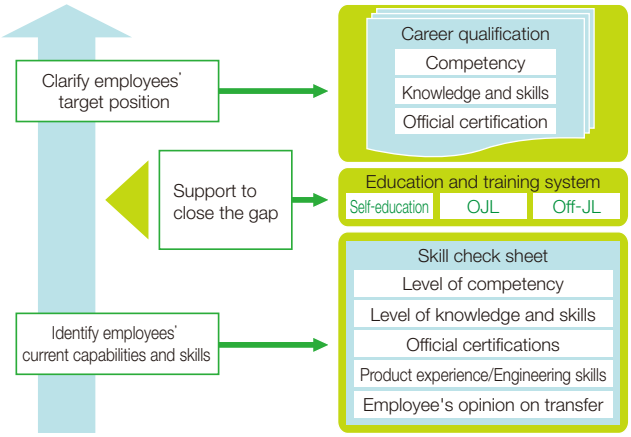


Human Resources Development and Deployment System

Human resources development forms the foundation for producing good products, providing good service, and being a good company. We take original approaches to human resource development, which is essential to the growth of the company.

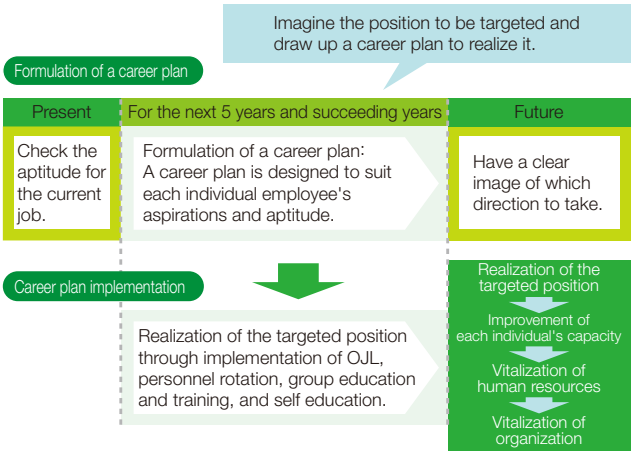
Educational System

In accordance with our personnel guidelines, our educational system places value on autonomy and calls on individuals to be the actors in their own growth. Based on the descriptions of desirable and required traits as defined in the Career Qualifications, employees can check their current traits, such as the skills they have, and the company will support them in education and training that will allow them to attain the desirable and required skills and traits.



Career Plan System

The Career Plan System includes formulation of a mid- and long-term development plan tailored to meet the aspirations and aptitude of each individual. Plans for human resources development are implemented in accordance with the mid- and long-term development plans.



Work Safety and Health

Under our fundamental policy of "creating a safe, friendly, and supportive workplace", we strive to build a workplace environment where employees can maintain health and vigor whether at work or at home and live a full life.

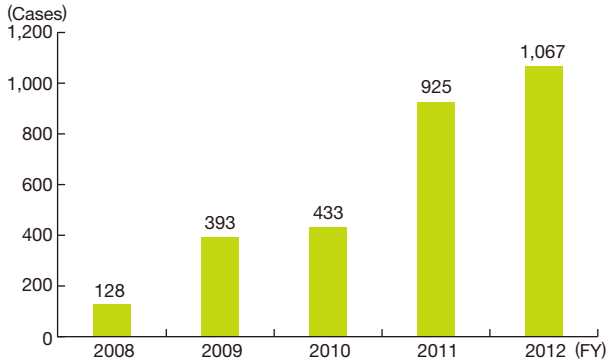
Striving for a Safer Workplace

We conduct training and provide work standards manuals to ensure that work is carried out safely, perform risk assessments to eliminate hazards, and incorporate Kiken Yochi training to prevent accidents in daily operations, in every division and department. Internal inspections are also carried out to determine whether the results of these activities meet health and safety guidelines and targets, and those results are reflected in subsequent quarterly or yearly plans.

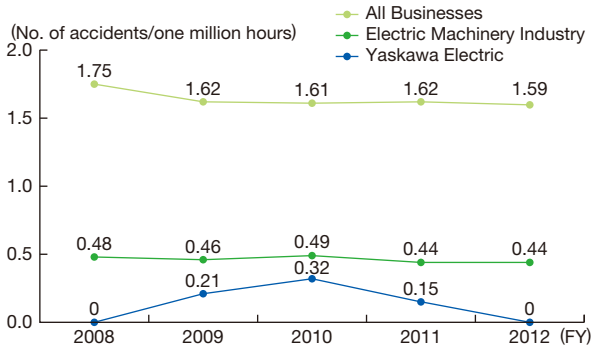
In the last several years we have put considerable effort into ensuring that work standards manuals are provided for any and all tasks, and that the manuals are regularly revised.

Furthermore, thanks to proactive implementation of risk assessment initiatives, the number of risks have declined year by year and the frequency of occupational accidents and injuries at Yaskawa are well below the average of the same industry. We will continue to take steps to prevent accidents, and strive to create a workplace with as little hazards as possible.

• Number of risks reduced after risk assessment



• Frequency of Occupational Accidents and Injuries



Employee Health Support

Employee general and special physical exams are carried out organically and efficiently, from ascertaining the work environment and selecting the right exams for the right employees, to performing tests and follow-up care, while giving ample consideration to relevant laws and regulations and various tests characteristics. This results in not only preventing work-related illness, but also works to educate and provide health care guidance with an emphasis on lifestyle and occupational support.

As part of our initiatives to prevent health problems due to overworking, workers who work over a certain amount of overtime see an occupational health physician who provides health guidance to the worker and feedback to his or her department head on necessary measures to take.

Mental Health Care

We recognize that mental diseases and disorders are just like physical diseases and can be potentially contracted by anyone. Therefore, we provide everyday living and occupational support.

In addition to mental illness, psychological stress can also impact one's health and lifestyle in a number of ways. As part of our measures to minimize stress, questionnaires are handed out to employees and feedback is provided to them and their department based on the results.

Support for returning to work from sick leave

When employees who are forced to take leave due to illness or injury are ready to return to work, the employee consults with their department's management and doctor to ensure that a supportive physical environment and human support structure is provided to the extent possible.

Relations with Shareholders and Investors

Yaskawa Electric aims to be a corporation that is trusted by shareholders, investors, and all its other stakeholders. To that end, we are working to realize management with a high degree of transparency by means of prompt, appropriate, and fair information disclosure.

Basic Rationale on Information Disclosure

Yaskawa Electric follows the Yaskawa Group Corporate Activity Standards, which state: "We shall engage in broad communication not only with shareholders, but also with members of society at large, including active and fair disclosure of corporate information." Based on this policy, we engage in prompt, appropriate, and fair information disclosure, strive to heighten management transparency, and build trust with our shareholders, the media, suppliers, business partners, and other stakeholders through proactive public relation and investor relation efforts, as well as through our website.

Investor Relations in FY2012

The Yaskawa Group positions IR activities as two-way communication with shareholders and investors. At the same time that we engage in prompt, appropriate, and fair information disclosure, we also provide the opinions of shareholders, investors, and other stakeholders as feedback to management. In this way, we strive to improve our corporate value.

In fiscal 2012, we worked to exchange information with institutional investors within and outside Japan by holding a total of roughly 700 meetings with approximately 1,600 investors. We also hold briefings on financial results for institutional investors and securities analysts twice a year. And in order to provide a deeper understanding of Yaskawa, we provide opportunities to see our products and services up close through encouraging visits to our locations both within and outside Japan, plant tours, and booths in trade shows.

Financial Results Briefing

Everyday communication with shareholders and investors outside of Japan is difficult. Thus in order to facilitate the smooth exchange of information with our investors in Asia, the U.S., and Europe, we visit their offices, participate in conferences organized by broker-dealers, and actively respond to requests for interviews using TV or international telephone.

Major IR Activities in FY2012

- A financial results briefing (biannual & annual)
- Plant and facility tours and IR presentations in Japan and other countries
- Visits to overseas investors (United States, United Kingdom, Hong Kong, Singapore)
- Conferences sponsored by securities firms, etc.

Adoption of a Socially Responsible Investment (SRI) Index

The Yaskawa Group has earned praise for its environmental, social and other CSR endeavors. Our stock has been a constituent of the "FTSE4Good Global Index," an international SRI index, since March 2004.

In addition, Yaskawa Electric was selected as one of the stocks included in the Nikkei Stock Average as of March 29, 2011.

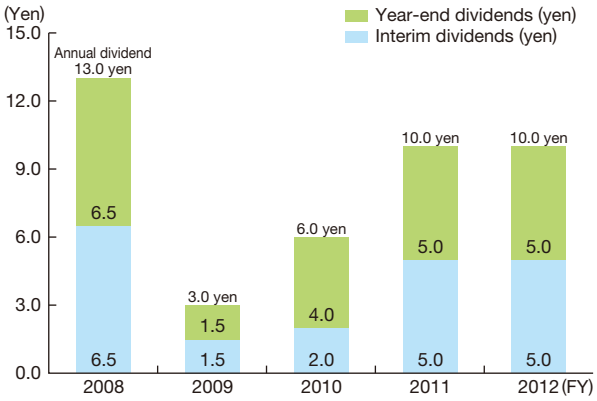
Returns to Shareholders

Our basic principles include providing stable and continual dividends to our shareholders, enriching our management base, and retaining earnings for future expansion of our business. In addition, we make our decisions based on overall consideration of factors such as our performance, the business environment, and our financial picture.

In the fiscal year ended March 2013, we paid an interim dividend of 5 yen per share. Together with the year-end dividend of 5 yen per share, the cash dividend for the year was 10 yen per share.

As regards uses for internal reserves, we have determined that the decision should take circumstances into account, and that basically we will channel the reserves into preparation for future business expansion and into research and development expenses in order to respond to anticipated changes in the business and management environment.

- Paid Dividends



To continue our company's evolution as a corporate citizen working together with society, we are pushing forward with revitalizing local communities and providing support to the young people, who will play an active role in the future.

Community Exchange

Yaskawa Electric strives to interact with the community and build a better relationship with people in local communities. To do this, we hold plant and office tours as well as firsthand work experience workshops, offer sponsorship of the local soccer team and active participation in local events.

Tours of Plants and Offices

Our robotics plant is part of the industry tour itinerary that is actively promoted by Kitakyushu city, where our head office is located. Yaskawa Electric offers a wide range of plant and office tours for children and adults. Visitors thus become better acquainted with our robot and other manufacturing sites. In FY2012, we welcomed more than 8,000 visitors.

Sponsoring Giravanz Kitakyushu

We have supported the Kitakyushu-based professional soccer team, Giravanz Kitakyushu, since 2009. We also contribute to the cultivation of young people by promoting sports in the local region. Our sponsor logo is displayed on the back of the team uniforms in FY2013 and everyone in the Yaskawa Group is rooting for them.

Supporters cheering in the stands

Locally-born player

Participating in the Wasshoi Hyakuman Natsumatsuri

A dance team of 150 Yaskawa Group employees participated in the Hyakuman odori (summer dance), which is part of the Wasshoi Hyakuman Natsumatsuri, a summer festival for the residents of Kitakyushu. Although our team was unable to win the Grand Prix award, it did win an award for excellence. Active involvement of our employees in local events contributes to vitalizing local communities, while helping to strengthen the bonds among employees.

Displaying Yaskawa-Kun at Various Special Events

Yaskawa-kun, an ice-cream vending robot, debuted in the summer of 2010 and continues to be exhibited at various events. Many adults as well as children, who ordinarily have little opportunity to see an industrial robot, are enjoying it greatly.

Food festival in Kitakyushu
"B1 Grand Prize"
(October 2012)

Yahata Kigyosai Festival
(November 2012)

Takara-ichi regional products fair—
part of the Junior Chamber International Japan's National Convention in Kitakyushu (October 2012)

Philanthropic Activities

We engage in a number of philanthropic activities including volunteer activities, events, and donating to a variety of organizations.

Yaskawa Mirai Club Initiatives

The Yaskawa Mirai (Future) Club was established on Yaskawa Electric's 90th anniversary in 2005 for the purpose of expressing our gratitude to all of our supporters including our customers, shareholders, and local residents, as well as further contributing to society.

The club is comprised of employees who endorse the club's goals and voluntarily participate. Specific activities include members continuously setting aside a portion of their salary as donations, which are accumulated and used to support groups working across three fields: medicine and welfare, the sound upbringing of the youth, and protecting and greening the environment.

In the future we plan to expand the club's activities by gathering ideas from members on new activities and groups to support. While the amount contributed by each person may be modest, the accumulated contribution of many employees contributes greatly to the community. We will continue to recruit new members to help make a difference in the community.

Yaskawa Mirai Club agriculture experience activities

Supporting Robot Competition for Students

Since 2005, Yaskawa Electric has co-sponsored the annual Technical College Students' Robot Contest, popularly known as the Kosen RoboCon, in which engineers-to-be from around Japan compete in contests focusing on robot production ideas and technology as well as robot performance. 2012 marked RoboCon's 25th anniversary.

As a company in the robotics business, we support this educational opportunity in order to encourage many young students to get involved in manufacturing and in hopes of fostering the next generation of talent.

Technical College Students' Robot Contest 2012

Yaskawa Cup Engineering Contest at Shanghai Jiao Tong University

Yaskawa Electric and Shanghai Jiao Tong University opened a joint laboratory on the school campus in 2008. We work together to research service robots and support the development of engineers in mechatronics. In May 2013 we held the Yaskawa Cup Engineering Contest in order to choose a team from the University to participate in the International Design Contest (IDC) held in San Paulo, Brazil in August 2013.

The winning team

We are promoting environmental management in order to pass on the bounty of the earth's blessings to the next generation.

Yaskawa Electric Environmental Management

In order to achieve a low-carbon society and a resource-recycling society, the Yaskawa Group is promoting environmental management by taking measures against global warning, by pursuing the recycling and the saving of resources, and by ensuring proper management of chemical substances as our priority objectives. Environmental management done by all employees is simultaneously oriented to both social contribution and improvement of corporate value, and it incorporates both green products and green processes in its perspective.

FY2020 Targets

Climate Change Prevention

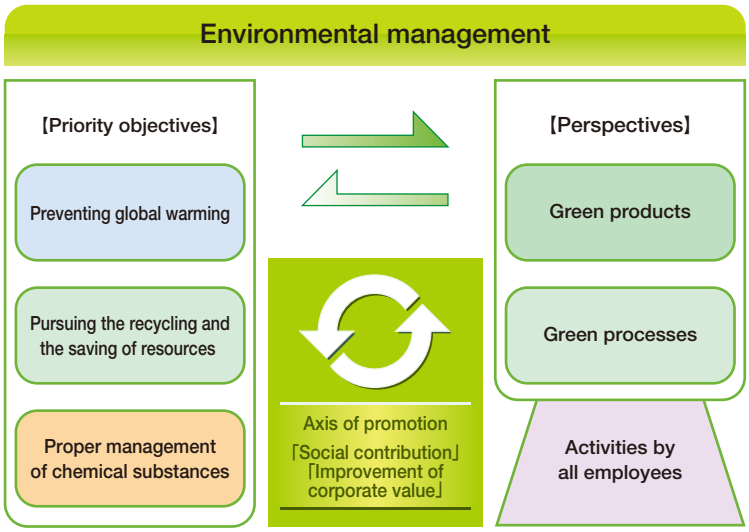
- Reduce CO_2 emissions through products and services
- Improve energy (and overall) efficiency
- Reduce specific energy consumption 10% (based on FY2012 results)
- Reduce peak power consumption 20% (based on FY2010 results)
- Adopt renewable energy and cut overall energy consumption rate at least 4%

Explore options for recycling and conserving resources

- Reduce use of scarce resources
- Achieve zero emissions
  Reduce final waste disposal rate to 0.5% or less
- Reduce paper volume 30% (compared with FY2011)

Proper management of chemical substances

- Practice global management to promote green procurement.
  Achieve 100% green procurement rate for all new procurements.



Voluntary Action Plan Targets and Achievements

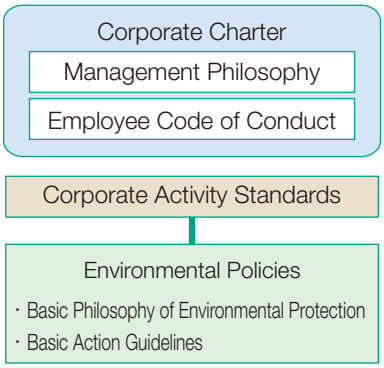
Category		Midterm Targets	FY2012 Targets	Results	Self Evaluation*
Reduction of greenhouse gas emissions		6% reduction of CO_2 emissions from the FY1990 level for Yaskawa production plants in Japan by FY2012	24% reduction of emissions, 55% reduction per unit of production from the FY1990 level	Worked to reduce CO_2 emissions by optimizing energy management and running "Green 1000" environmental activities in which all personnel participate; achieved 26% reduction in emissions, 55% reduction per unit of output. Also achieved mid, long-term targets by reducing emissions 24% and emissions per unit of output 54% on average from FY2008 through 2012.	A
Reduction of total waste (including revenue-generating waste)		Final disposal rate of industrial waste: 1% or less	Final disposal rate of industrial waste: 1% or less	Filtered and reused cutting fluid Final disposal rate: companywide (0.55%), Production sites (0.55%)	SA
			Final disposal rate of total waste: 1.1% or less	Revised paper sorting and classified method Final disposal rate: companywide (1.15 %), production sites (1.17%)	B
Hazardous chemical substances control	Reduction of volatile organic compounds (VOC)	30% reduction in emissions from the FY2000 level	Analysis of emissions Drawing up of priority measures	Improved by replacing paint 40.6% reduction compared with FY2000	SA
	Green products	Ensure 80% or higher green procurement rate on all new procurements on a company-wide scale	Implement Green Procurement compliant with REACH regulations	Implemented Green Procurement of new procurement goods Implementation rate: 77%	B
	Disposal of PCB-containing equipment	· Material containing high concentrations of PCB: Implement proper disposal by 2016 · Material containing trace amounts of PCB: Start from disposable machines as needed	Achieve proper storage of material containing high concentrations of PCB. Start disposal of material containing trace amounts of PCB.	Built storehouse for equipment containing PCB. Proper disposal of pollutants containing high concentration PCB: Approx. 0.8t Proper disposal of oil containing trace amounts of PCB: Approx. 14t	SA
Environmental management	Environmental management system	Maintenance of ISO 14001 and continuous improvements in environmental performance indexes	Applicable plants pass audit under ISO 14001:2004	Passed all reassessments and periodic inspections at plants across Japan; received only one finding.	A
	Design for environment	100% implementation of environmental evaluations using life cycle assessment (LCA) for environmentally strategic products.	LCA implementation rate of environmentally strategic products: 100%	Implemented in accordance with operational regulations. Achieved 100% LCA implementation rate	A

* Self-evaluated achievement ratios to targets: SA - 130% or more, A - 100% or more, B - 50% or more, C - under 50%

Environmental Policies

Corporate Standards and Environmental Protection

Compliance System



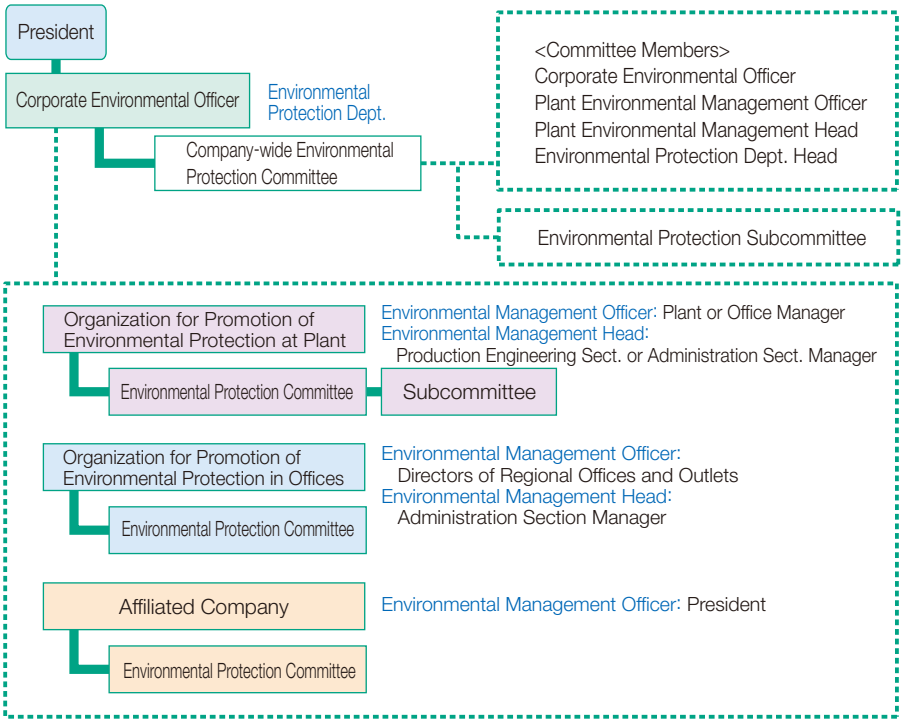
Basic Philosophy of Environmental Protection

Our management philosophy is that our company's mission is to contribute to the evolution of society and the welfare of humankind through our business activities.
The Yaskawa Group recognizes that the protection of the environment is one of the most important issues for all humankind. In every aspect of business, we must consider and act in ways to protect the environment, and in doing so, we will be in agreement with our own management philosophy and serving our duty to society.

Basic Action Guidelines

1. Seek to realize a sustainable society by positioning the problem of the global environment as one of our most important management issues and engaging in company-wide environmental protection activities.
2. Assess the environmental impact of our business activities and product development and strive to reduce the burden on the environment in each of the phases of the product's lifecycle from research and development to design, material procurement, manufacturing, distribution, use, and disposal.
3. Observe environmental laws and regulations and furthermore, set our own standards and strive to continuously raise the level of our environmental management.
4. Take on the challenge of innovation in environmental and energy technology and strive to develop and supply next-generation products and services that will resolve environmental issues.
5. Implement environmental education and awareness-raising activities, increasing the awareness of all employees regarding environmental protection while also taking steps toward harmonious coexistence with local communities by means of environmental protection programs.
6. Provide for thoroughgoing commitment by all employees to our environmental policies, and actively make our environmental policies and information accessible to the public at large.

Organization for Promotion of Environmental Protection



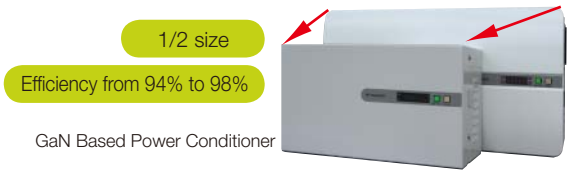
Yaskawa and affiliated companies have continued to promote the environmental programs in accordance with group-wide policies and implementation plans that have been deliberated and decided by the Company-wide Environmental Protection Committee.

In 2015 our company will celebrate 100 years. As part of our vision for the year 2015 we will leverage our core technologies to tackle such global challenges as declining birthrates and increased aged population of developed counties and environmental energy problems. In the environmental energy business field, we will evolve our motor drive technology and energy conversion technology—our company's strong suits—to offer products and services that can contribute to both energy creation and energy conservation.

Energy Creation

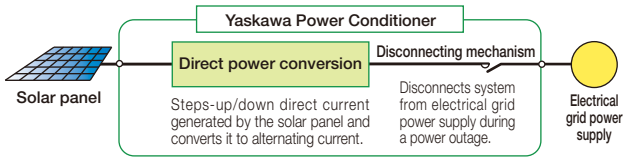
Development of the World's First GaN Based Power Conditioner

Our company developed the world's first next-generation power conditioner equipped with a GaN (gallium-nitride) power semiconductor module. It has a footprint half the size of our current model and boasts a conversion efficiency rate of 98%--the highest in the world. We are aiming for commercialization in the next fiscal year.



＜What is a power conditioner?＞

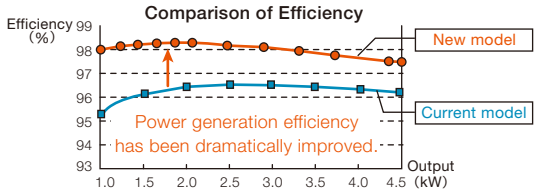
A power conditioner is a device that coverts DC power generated from solar panels to high quality AC power to be used in homes and in the electrical grid power supply of power companies.



【Description of the Main Technology】

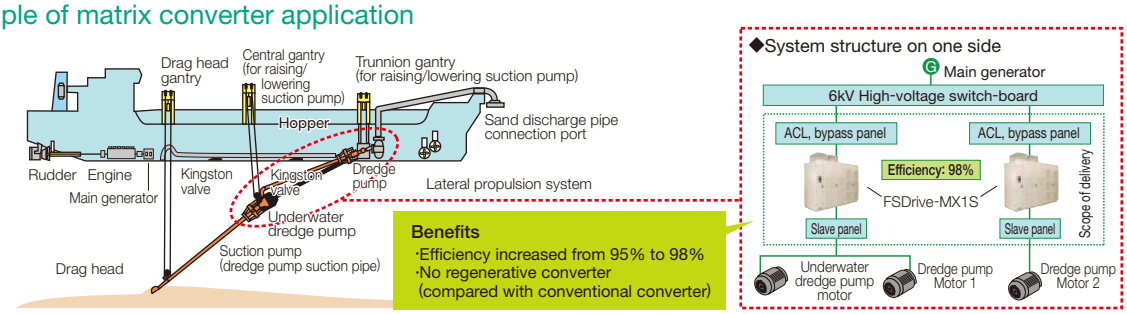
Yaskawa Electric, in collaboration with Transphorm, Inc. (USA), developed a GaN power semiconductor module capable of high-speed switching and low-loss when on. Combining our technological expertise on drive system circuitry and structure cultivated over many years with newly developed control technology, we produced a module that is more compact with greatly improved efficiency.

Power specifications	Input voltage	DC250V
	Output voltage	AC200V
	Rated capacity	4.5kW
Footprint	1/2 size of our current model (cubic volume approx. 10L)	
Conversion efficiency	Max 92%, Rated 97.5%	



Energy Conservation

Example of matrix converter application



Our FSDrive-MX1S high voltage matrix converter is used in the dredge pump drive device of "Andromeda V" (owned by Penta-Ocean Construction)—the world's largest self-propelled dredger.

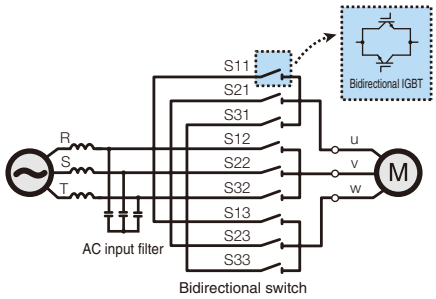
The vessel is a drag suction dredger that sucks up sediment from the seabed, stores it in the onboard hopper, transports it, and discharges it overboard. A pump operation control system that is highly efficient, precise, and wide-ranging is needed to accommodate the viscosity of the seabed sediment and a variety of applications. And the regenerative power produced when sediment is returned to the seabed from the hopper must be addressed as well. The FSDrive-MX solves these problems, boasts a simple system structure, conserves energy and space, and requires little maintenance.

We will continue to fine-tune the technology to meet the wide range of needs in the field of offshore engineering.

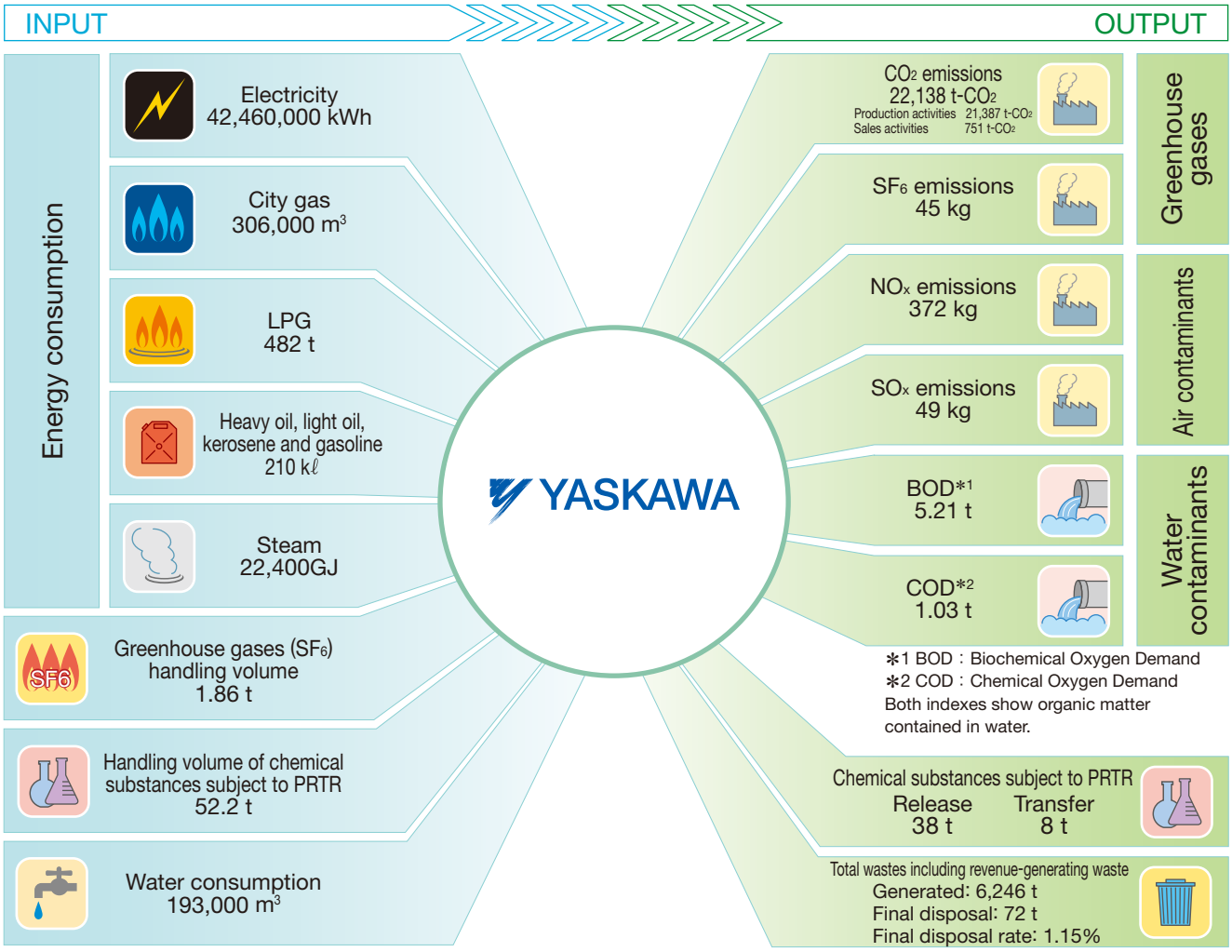
＜What is a matrix converter?＞

In 2005 we succeeded in developing technology to build a converter that directly converts AC to AC, rather than AC to DC to AC as in most conventional inverters.

• Main circuit configuration of matrix converter



Environmental Impact Data Summary (FY2012)

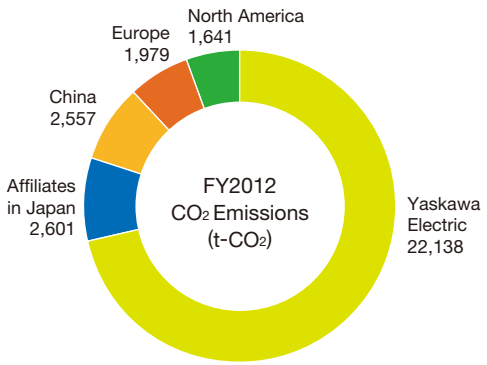


Yaskawa Electric uses energy (electricity, gas, etc.), components, and resources such as materials and water for engineering, manufacturing and sales of electrical products and systems, and other related businesses. As a result, we generate CO_2 and waste materials. The above figure shows the status of the environmental impact of our production and sales activities.

We also manage environmental data (amount of energy used, CO_2 emissions, and waste emissions from business activities) of companies in our group around the world. The system manages the data of the companies that use a large amount of energy (accounting for 90% of the energy used by the entire group).

Going forward, we will promote expansion of the scope of management and reduction of the environmental impact as the number of business centers and the amount of energy used increase.

The graph below shows FY2012 CO_2 emissions from energy by Yaskawa Group.



Preventing Global Warming

Energy Conservation and Saving Electric Power through Production Activities

Yaskawa Electric is taking measures to reduce CO_2 emissions in order to prevent global warming. Most of the CO_2 emissions from Yaskawa Electric are energy-derived.

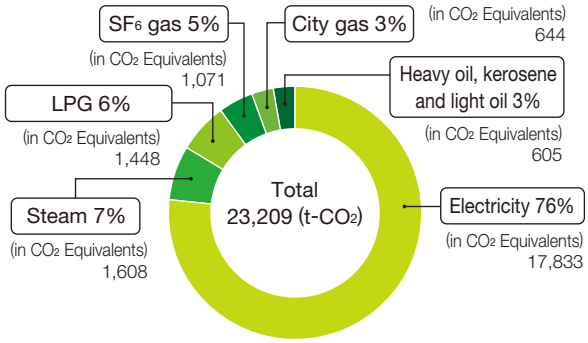
The largest source of CO_2 emissions in fiscal 2012 was electric power—accounting for 76% of total emissions. We furthered efforts to reduce the amount of electric power used and to increase the efficiency of our facilities.

Total CO_2 emissions from production amounted to 21,387 t-CO_2—a 26% reduction compared to FY1990. Results per unit of output came to 14.4 t-CO_2/100 million yen. This is a 55% reduction compared to FY 1990 and 11.8% compared to the FY2012 target of a 10% reduction (BAU).

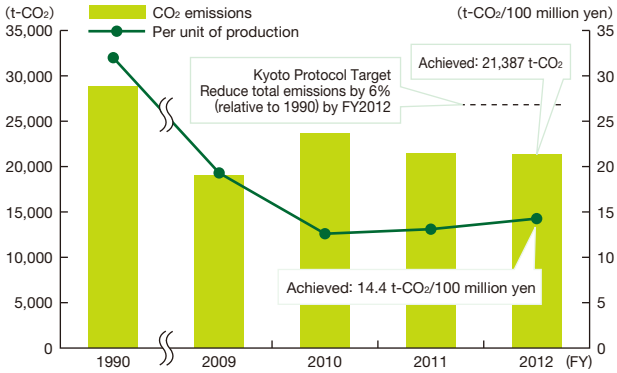
Energy-conservation efforts consisted of furthering the installation of LED lights and replacing old, inefficient air conditioning units. We also implemented a "factory patrol" performed by a cross-functional energy-conservation promotion team, who contributed 21 energy-saving ideas. Six of those have already been implemented—resulting in 37-t/year reduction in CO_2 emissions.

Factory Patrol

• CO_2 emissions in FY2012



• Total CO_2 emissions and CO_2 per unit of production



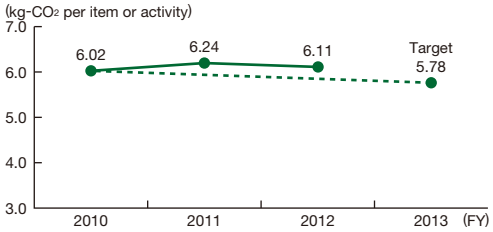
Reducing CO_2 Emissions in Logistics

Initiatives to reduce CO_2 emissions in logistics were initiated in FY2010. Efforts are moving forward to achieve the goal of reducing emissions intensity in FY2013 by 4% compared with FY2010.

CO_2 emissions from logistics activities accounted for 50% and 45% of emissions for transportation and packing, respectively. Loading ratio in transportation was improved. Efforts including the reduction of empty trucks and packing materials have been put in place.

We are also undertaking efforts to switch from shipping tags to sticker labels to reduce and absorb CO_2 produced when incinerating.

• CO_2 emissions volume per basic unit in logistics activities (per item/activity unit)



Cases of In-House Performance

Switching to High-efficient Lighting

· Replaced 1350 office lights with LED lights.

· Replaced 130 mercury-vapor lambs with ceramic metal-halide lamps. 84% of all mercury-vapor lambs throughout the company have been switched with high-efficient lights.

Office and hallway lighting replaced with LED lights

Switching to High-efficient Air Conditioners

· Replaced 30 old, inefficient air conditioning units with new models to improve air conditioning efficiency.

Improvement of the air-conditioning efficiency

· Created a partition around the kiosk in the employee cafeteria and turn on the air conditioning only in the kiosk when the cafeteria is closed.

Partition around kiosk in cafeteria

Power-Saving Efforts

Since fiscal 2011 the entire company has joined in on measures to save electrical power during the summer and winter in order to help contribute to efforts in Japan to improve power supply and demand.

In fiscal 2012 we began using the energy management system introduced in our production sites as a tool for saving electricity. When the power usage reaches the alarm zone, a warning is sent by email or broadcasted within the plant and the power-saving supervisor takes appropriate action. This has resulted in a reduction of maximum energy usage by 13.1% in the summer and 11.1% in the winter, relative to FY2010.

In the future we plan to implement a smart power-saving mechanism by utilizing the demand control function of this energy management system and expand its application into other energy conservation initiatives as well.

History of the Energy Management System

Oct 2011: Installed energy management system in 6 production sites, enabling the visualization of power usage.

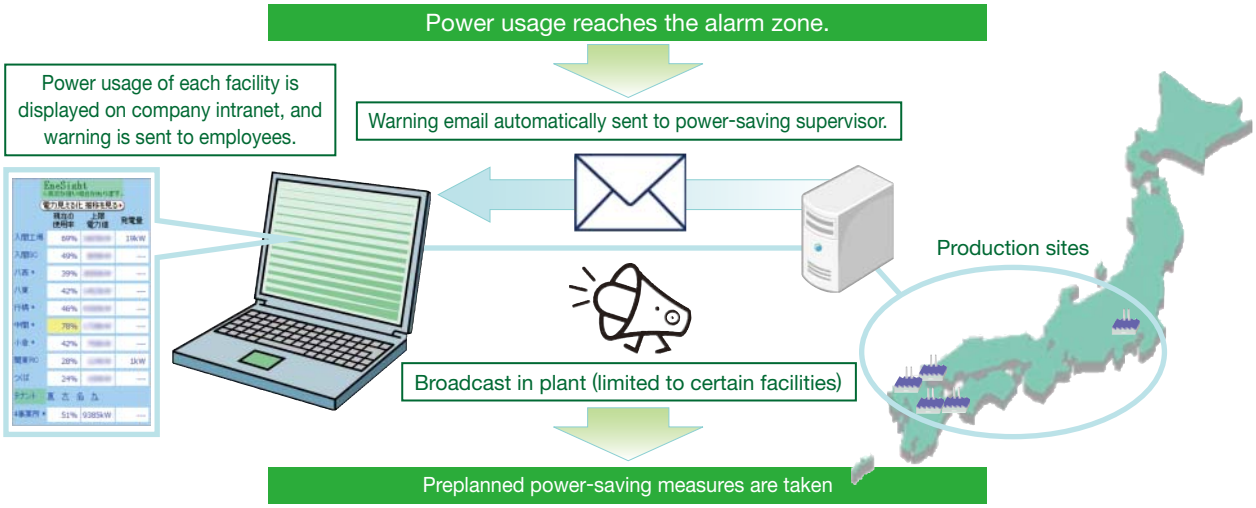
Jul 2012: Added mechanism to automatically send warning email to relevant supervisor to use in saving power.

Aug 2012: Deployed system in 6 non-production facilities and completed implementation in all facilities in Japan.

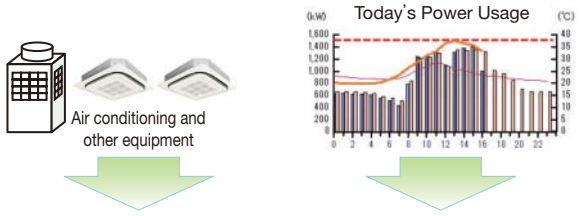
Mar 2013: Subdivided scope of power visualization in production sites.

Jun 2013: Added demand control function to production sites to achieve smart power-saving.

Power-saving measures utilizing our energy management system



Future Efforts



The current energy management system is based on the EneSight Electrical Power Visualization System*, which was used through FY2012. It has garnered high acclaim and earned Kitakyushu's Green Frontier award in March 2013.

*EneSight is an energy management system developed by Yaskawa Information Systems.

Reduction in Resources Used

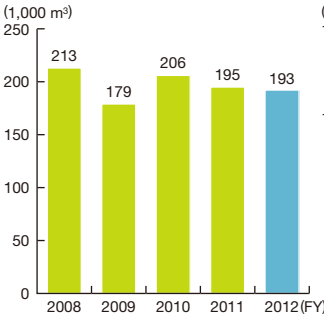
Initiatives for Water and Paper Resources Conservation

To ensure effective utilization of limited resources, we have been working on reducing the amount of water, paper and other resources we use.

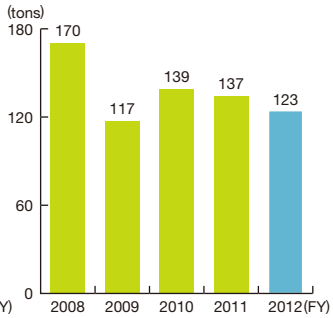
We successfully reduced water usage 1% and paper usage 10% more than last year. Efforts to reduce paper were especially effective — which is largely owed to the introduction of a printing authorization system to reduce unnecessary printing.

In the future we plan to further reduce paper usage through implementing a system to visualize printing information.

• Amount of water used



• Amount of paper used



Reduction of Packaging Timber

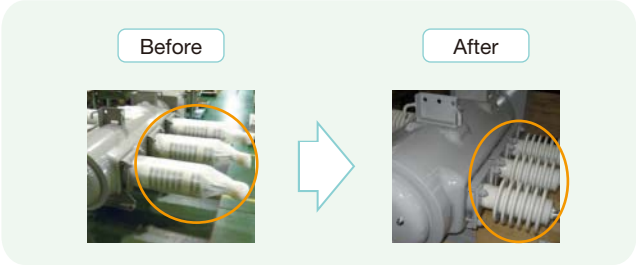
Previously, we used wood in a portion of packing materials to protect the heat sink on the bottom of our multi-axial convertor products.

By switching to reinforced cardboard that that customers can easily recycle, we reduced the amount of wood used.We expect to reduce the use wood materials by 56 t/year.

Reducing Package Cushioning

We eliminated the need for package cushioning on the insulators of pole-mounted switchegears packed in wooden crates.

Previously, cushioning was added if the customer requested it, but thanks to their understanding that using cushioning sheets in wooden crates is excessive, we were able to eliminate its use. Furthering efforts like this helps reduce the use of resources.



Reduction of Industrial Waste

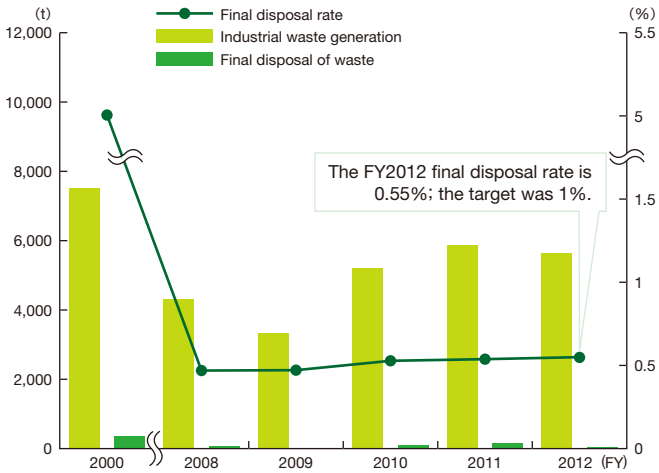
We are working to expand efficient use of resources by reducing industrial waste and enforcing waste sorting.

The final disposal rate for FY2012 came to 0.55%—maintaining the 1% or lower target.

Efforts to reduce the final disposal amount consist of reusing the water-soluble cutting fluids that adheres to the sawdust accumulated in collection boxes.

For fiscal 2013 we will re-examine what types of paper can be recycled and work to reduce the amount of non-industrial waste discharged.

• Industrial waste generation and final disposal of waste

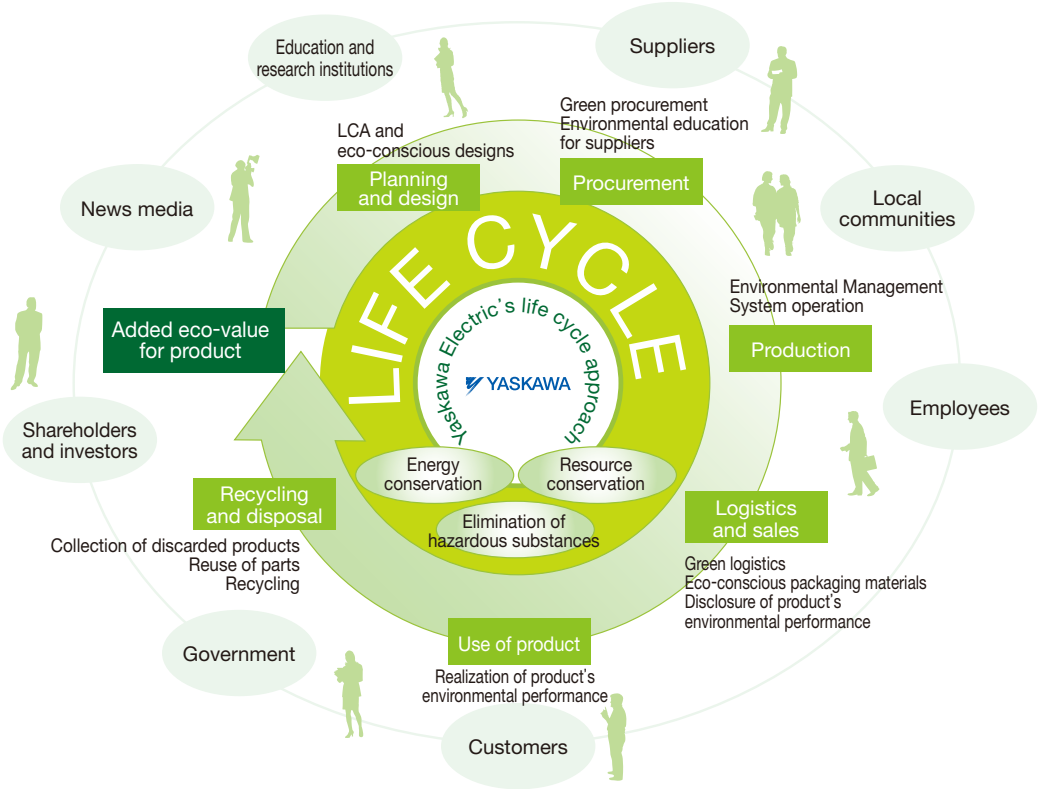


Consideration for the Environment in Our Products

Taking Measures in Product Development

We are accelerating efforts to reduce the environmental impact of Yaskawa Electric's products by making energy conservation, the recycling and saving of resources, and proper management of chemical substances into priority objectives. These objectives apply throughout every stage of the product lifecycle—from materials procurement, manufacturing, and sales, to actual use and recycle or disposal.

In product development, Yaskawa Electric has formulated product assessment regulations and set up a system to verify that eco-conscious design is being used and to prevent the release of products that do not achieve a certain level. By introducing life cycle assessment (LCA) practices, we have also enabled visual measurement of environmental impact at every stage in a product's life cycle. This clarifies product issues and has made it possible to verify the effectiveness of countermeasures. We intend to make use of these arrangements to continue reducing the environmental impact of our products even more throughout their entire life cycle.



Example of Eco-Conscious Technology

Toyota Auto Body's user-friendly, eco-friendly ultra-compact electric vehicle "COMS" is equipped with a motor manufactured by Yaskawa Electric.

Leveraging our company's motor technology expertise accumulated for many years, we were able to dramatically increase mileage per charge and speed, and deliver unmatched environmental performance. And needless to say it emits no CO_2 or other pollutants while running

It is currently being used by a major convenience store chain for their delivery service and as a company vehicle at our Yahata-nishi, Kokura, and Yukuhashi plants, as well as at our Kanto Robotics Center.

Motor adopted in "COMS"

Financial Report

The financial statements were prepared on the basis of "Consolidated Results for the Fiscal Year Ended March 20, 2013 (unaudited)" announced on April 18, 2013, and is provided for the convenience of investors.

For the Company's security report under the terms of the Financial Instruments and Exchange Act, please see the Company's website and the Electronic Disclosure for Investors NETwork (EDINET).

Consolidated Balance Sheets

Yaskawa Electric Corporation and Consolidated Subsidiaries As of March 20, 2012 and 2013

(Millions of yen)

	2012	2013
Assets		
Current assets		
Cash and deposits	20,343	**19,493**
Trade notes and accounts receivable	91,411	**99,729**
Merchandise and finished goods	41,869	**39,208**
Goods in process	7,793	**9,530**
Raw materials and supplies	14,136	**15,586**
Deferred tax assets	6,223	**7,757**
Other	19,234	**18,504**
Allowance for doubtful accounts	(1,440)	**(1,306)**
Total current assets	199,572	**208,505**
Fixed assets		
Property, plant and equipment		
Buildings and structures, net	15,398	**17,193**
Machinery and transportation equipment, net	8,183	**8,841**
Land	8,312	**8,172**
Other, net	5,589	**6,659**
Total property, plant and equipment	37,484	**40,866**
Intangible assets		
Software	4,502	**4,788**
Other	2,232	**8,818**
Total intangible assets	6,734	**13,607**
Investments and other assets		
Investments	18,595	**20,343**
Long-term loans	168	**167**
Deferred tax assets	12,383	**10,914**
Other	4,511	**8,485**
Allowance for doubtful accounts	(377)	**(372)**
Total investments and other assets	35,280	**39,539**
Total fixed assets	79,499	**94,013**
Total assets	279,072	**302,518**

(Millions of yen)

	2012	2013
Liabilities		
Current liabilities		
Trade notes and accounts payable	53,073	**58,718**
Short-term loans	34,042	**24,262**
Accrued expenses	17,632	**20,009**
Income taxes payable	370	**1,660**
Accrued directors' bonus	57	**47**
Other	11,934	**15,766**
Total current liabilities	117,111	**120,464**
Long-term liabilities		
Convertible bonds	15,000	**15,000**
Long-term debt	9,029	**14,899**
Provision for employees' retirement benefits	30,535	**25,741**
Provision for directors' retirement benefits	299	**227**
Other	2,589	**8,719**
Total long-term liabilities	57,453	**64,588**
Total liabilities	174,564	**185,052**
Net assets		
Shareholders' equity		
Common stock	23,062	**23,062**
Additional paid-in capital	18,684	**18,684**
Retained earnings	63,363	**67,599**
Treasury stock, at cost	(440)	**(449)**
Total shareholders' equity	104,669	**108,896**
Accumulated other comprehensive income		
Net unrealized holding gain on securities	2,547	**3,749**
Foreign currency translation adjustments	(7,107)	**(427)**
Total accumulated other comprehensive income	(4,559)	**3,322**
Minority interests	4,398	**5,247**
Total net assets	104,507	**117,465**
Total liabilities and net assets	279,072	**302,518**

Consolidated Statements of Income and Consolidated Statements of Comprehensive Income

Yaskawa Electric Corporation and Consolidated Subsidiaries Years ended March 20, 2012 and 2013

(Millions of yen)

Consolidated Statements of Income	2012	2013
Net sales	307,111	**310,383**
Cost of sales	227,540	**228,274**
Gross profit	79,571	**82,108**
Selling, general and administrative expenses	64,752	**69,037**
Operating income	14,818	**13,070**
Non-operating income		
Interest income	62	**114**
Dividends received	329	**420**
Equity in earnings of associated companies	760	**975**
Foreign exchange gains	61	–
Miscellaneous income	551	**562**
Total non-operating income	1,764	**2,073**
Non-operating expenses		
Interest expenses	727	**620**
Foreign exchange losses	–	**277**
Miscellaneous expenses	230	**193**
Total non-operating expenses	957	**1,091**
Ordinary income	15,626	**14,053**
Extraordinary gains		
Gain on sales of fixed assets	24	**113**
Gain on sales of investment securities	8	**51**
Gain on sales of shares of affilicated companies	–	**172**
Reversal of allowance for doubtful accounts	65	–
Gain on negative goodwill	1,091	–
Gain on step acquisitions	–	**162**
Gain on revision of retirement benefit scheme	–	**67**
Other	58	**9**
Total extraordinary gains	1,248	**577**
Extraordinary losses		
Loss on sales and disposal of fixed assets	112	**218**
Loss on devaluation of investment securities	170	**219**
Impairment loss	–	**286**
Loss on adjustment for changes of accounting standard for asset retirement obligations	332	–
Loss on step acquisitions	146	–
Reorganization costs	–	**1,540**
Other	759	**239**
Total extraordinary losses	1,521	**2,505**
Income before income taxes and minority interests	15,353	**12,125**
Provision for income taxes- current	4,076	**4,812**
Provision for income taxes- deferred	2,684	**(110)**
Total income taxes	6,760	**4,702**
Income before minority interests	8,592	**7,423**
Minority interests in income	160	**622**
Net income	8,432	**6,800**

(Millions of yen)

Consolidated Statements of Comprehensive Income	2012	2013
Income before minority interests	8,592	**7,423**
Other comprehensive income		
Net unrealized holding gain on securities	807	**1,232**
Foreign currency translation adjustment	(102)	**6,741**
Share of other comprehensive income of associates accounted for using equity method	104	**141**
Total other comprehensive income	808	**8,115**
Comprehensive income	9,401	**15,539**
(Breakdown)		
Comprehensive income attributable to shareholders of the Company	9,271	**14,682**
Comprehensive income attributable to minority interests	130	**856**

Consolidated Statements of Changes in Net Assets

Yaskawa Electric Corporation and Consolidated Subsidiaries Years ended March 20, 2012 and 2013

(Millions of yen)

	2012	2013
Shareholders' equity		
Common stock		
Balance at the beginning of current period	23,062	**23,062**
Changes of items during the period		
Total changes of items during the period	–	–
Balance at the end of current period	23,062	**23,062**
Additional paid-in capital		
Balance at the beginning of current period	18,682	**18,684**
Changes of items during the period		
Disposition of treasury stock	1	–
Total changes of items during the period	1	–
Balance at the end of current period	18,684	**18,684**
Retained earnings		
Balance at the beginning of current period	57,281	**63,363**
Changes of items during the period		
Cash dividends	(2,267)	**(2,519)**
Net income	8,432	**6,800**
Change in scope of consolidation	249	**(45)**
Change in scope of equity method	(331)	–
Total changes of items during the period	6,081	**4,236**
Balance at the end of current period	63,363	**67,599**
Treasury stock		
Balance at the beginning of current period	(425)	**(440)**
Changes of items during the period		
Acquisition of treasury stock	(18)	**(9)**
Disposition of treasury stock	3	–
Total changes of items during the period	(14)	**(9)**
Balance at the end of current period	(440)	**(449)**
Total shareholders' equity		
Balance at the beginning of current period	98,600	**104,669**
Changes of items during the period		
Cash dividends	(2,267)	**(2,519)**
Net income	8,432	**6,800**
Acquisition of treasury stock	(18)	**(9)**
Disposition of treasury stock	4	–
Change in scope of consolidation	249	**(45)**
Change in scope of equity method	(331)	–
Total changes of items during the period	6,068	**4,226**
Balance at the end of current period	104,669	**108,896**

(Millions of yen)

	2012	2013
Accumulated other comprehensive income		
Net unrealized holding gain on securities		
Balance at the beginning of current period	1,731	**2,547**
Changes of items during the period		
Net changes of items other than shareholders' equity	815	**1,202**
Total changes of items during the period	815	**1,202**
Balance at the end of current period	2,547	**3,749**
Foreign currency translation adjustments		
Balance at the end of previous period	(7,111)	**(7,107)**
Changes of items during the period		
Net changes of items other than shareholders' equity	4	**6,679**
Total changes of items during the period	4	**6,679**
Balance at the end of current period	(7,107)	**(427)**
Total accumulated other comprehensive income		
Balance at the end of previous period	(5,380)	**(4,559)**
Changes of items during the period		
Net changes of items other than shareholders' equity	820	**7,882**
Total changes of items during the period	820	**7,882**
Balance at the end of current period	(4,559)	**3,322**
Minority interests		
Balance at the end of previous period	4,808	**4,398**
Changes of items during the period		
Net changes of items other than shareholders' equity	(410)	**848**
Total changes of items during the period	(410)	**848**
Balance at the end of current period	4,398	**5,247**
Total net assets		
Balance at the end of previous period	98,029	**104,507**
Changes of items during the period		
Cash dividends	(2,267)	**(2,519)**
Net income	8,432	**6,800**
Acquisition of treasury stock	(18)	**(9)**
Disposition of treasury stock	4	–
Change of scope of consolidation	249	**(45)**
Change of scope of equity method	(331)	–
Net changes of items other than shareholders' equity	409	**8,730**
Total changes of items during the period	6,478	**12,957**
Balance at the end of current period	104,507	**117,465**

Consolidated Statements of Cash Flows

Yaskawa Electric Corporation and Consolidated Subsidiaries Years ended March 20, 2012 and 2013

(Millions of yen)

	2012	2013
Cash flows from operating activities		
Income before income taxes and minority interests	15,353	**12,125**
Depreciation and amortization	7,606	**8,114**
Loss on adjustment for changes of accounting standard for asset retirement	332	–
Loss (gain) on step acquisitions	146	**(162)**
Gain on negative goodwill	(1,091)	–
Impairment loss	–	**286**
Decrease in allowance for doubtful accounts	(436)	**(225)**
Decrease in provision for employees' retirement benefits	(111)	**(4,909)**
Increase (decrease) in provision for directors' retirement benefits	6	**(72)**
Loss on sales and retirement of fixed assets	87	**105**
Loss (gain) on sales of investment securities	12	**(51)**
Gain on sales of shares of affilicated companies	–	**(172)**
Loss on valuation of investment securities	170	**219**
Interest and dividend income	(391)	**(535)**
Interest expense	727	**620**
Decrease in trade receivables	1,858	**171**
Decrase (increase) in inventories	(2,632)	**7,084**
Decrease in trade payables	(10,289)	**(1,128)**
Increase in accrued expenses	111	**1,176**
Other	655	**5,274**
Subtotal	12,115	**27,921**
Interest and dividends received	549	**983**
Interest paid	(706)	**(618)**
Income taxes paid	(5,566)	**(3,646)**
Net cash provided by operating activities	6,391	**24,640**
Cash flows from investing activities		
Purchase of property, plant and equipment and intangible assets	(9,863)	**(11,278)**
Proceeds from sales of property, plant and equipment and intangible assets	77	**167**
Purchases of investment securities	(1,837)	**(2,453)**
Proceeds from sales of investment securities	23	**139**
Purchase of shares of subsidiaries resulting in change in scope of consolidation	–	**(4,242)**
Proceeds from purchase of shares of subsidiaries resulting in change in scope of consolidation	198	**90**
Proceeds from sales of shares of subsidiaries resulting in change in scope of consolidation	–	**158**
Other	(472)	**(641)**
Net cash used in investing activities	(11,874)	**(18,058)**
Cash flows from financing activities		
Decrease in short-term debt	(936)	**(12,146)**
Proceeds from long-term debt	5,424	**10,538**
Repayments of long-term debt	(3,536)	**(4,802)**
Proceeds from issuance of bonds	15,000	–
Dividends paid	(2,267)	**(2,519)**
Dividends paid to minority shareholders	(68)	**(86)**
Other	(24)	**(36)**
Net cash provided by (used in) financing activities	13,592	**(9,053)**
Effect of exchange rate changes on cash and cash equivalents	(39)	**1,339**
Net increase (decrease) in cash and cash equivalents	8,068	**(1,131)**
Cash and cash equivalents at beginning of year	11,885	**20,206**
Increase due to inclusion of subsidiaries in consolidation	251	**36**
Increase in cash and cash equivalents resulting from merger with unconsolidated subsidiaries	–	**277**
Cash and cash equivalents at the end of period	20,206	**19,389**

Basis of Presentation of Consolidated Financial Statements

(1) Scope of consolidation and application of equity method

There are 67 consolidated subsidiaries and 18 companies accounted for using the equity method.

(2) Changes in scope of consolidation and application of equity method

Consolidation

New: 5 companies　Eliminated: 1 company

Equity method

New: 5 companies　Eliminated: None

No further information is provided, except the information provided above, because there have been no significant changes since the most recent Securities Report (released on June 20, 2012).

Corporate Information

As of March 20, 2013

Corporate Name YASKAWA Electric Corporation

Founded July 16, 1915

Employees Consolidated 10,383 [3,284*]
*The average annual number of temporary employees

Head Office 2-1 Kurosakishiroishi, Yahatanishi-ku,
Kitakyushu 806-0004, Japan
Phone +81-93-645-8801
Fax. +81-93-631-8837

Head Office Building

Tokyo Office New Pier Takeshiba South Tower, 1-16-1
Kaigan, Minato-ku, Tokyo 105-6891, Japan
Phone +81-3-5402-4511
Fax. +81-3-5402-4580

Sales Offices

Nagoya Office	Phone +81-52-581-2761 Fax. +81-52-581-2274
Osaka Office	Phone +81-6-6346-4500 Fax. +81-6-6346-4555
Kyushu Office	Phone +81-92-714-5331 Fax. +81-92-714-5799

Plants Yahata-nishi Plant, Yahata-higashi Plant,
Yukuhashi Plant, Iruma Plant

Laboratories Corporate Research & Development Center
(Kokura Plant), Tsukuba Research Laboratory

Group Companies

Japan

YE DATA INC.
Information-related products and services (optomechatronics, Information security and information multimedia)

YASKAWA INFORMATION SYSTEMS CORPORATION
Information processing, software development, sales of system equipment

YASAKWA CONTROLS CO., LTD.
Manufacturing and sales of electric machines, and parts

YASKAWA ELECTRIC ENGINEERING CORPORATION
Maintenance, test operation and adjustment of electric machines and facilities and technical training

YASKAWA LOGISTEC CORPORATION
General product distribution

YASKAWA MOTOR CORPORATION
Design, manufacturing, sales and maintenance of motors, generators and motor applications

YASKAWA MECHATREC CORPORATION
Sales of electric machines and other machinery

Europe

YASKAWA EUROPE GmbH (Germany)
Manufacturing, sales, and after-sales service of AC drives, servo motors and controllers.
Sales and after-sales service of robots

YASKAWA NORDIC AB (Sweden)
Sales and after-sales service of robots

YASKAWA ELECTRIC UK LTD. (U.K.)
Manufacturing, sales, and after-sales service of AC drives

YASKAWA EUROPE TECHNOLOGY LTD. (Israel)
Development, manufacturing, sales, and after-sales service of servo motors and controllers. Sales and after-sales service of robots

Asia

YASKAWA ELECTRIC (CHINA) CO., LTD. (China)
Sales and after-sales service of AC drives, servo motors and controllers

SHANGHAI YASKAWA DRIVE CO., LTD. (China)
Manufacturing and sales of AC drives, servo motors and controllers

YASKAWA SHOUGANG ROBOT CO., LTD. (China)
Sales and after-sales service of robots

YASKAWA ELECTRIC (SHENYANG) CO., LTD. (China)
Manufacturing, sales, and after-sales service of servo motors and controllers

YASKAWA ELECTRIC (SINGAPORE) PTE. LTD. (Singapore)
Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC KOREA CORPORATION (Korea)
Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC TAIWAN CORPORATION (Taiwan)
Sales and after-sales service of AC drives, servo motors, controllers and robots

YASKAWA ELECTRIC INDIA PVT. LTD. (India)
Manufacturing and sales of AC drives.
Sales and after-sales service of robots

The Americas

YASKAWA AMERICA, INC. (U.S.A.)
Manufacturing, sales, and after-sales service of AC drives, servo motors and controllers. Sales and after-sales service of robots

YASKAWA CANADA, INC. (Canada)
After-sales service of AC drives, servo motors and controllers.
Sales and after-sales service of robots

YASKAWA ELÉTRICO DO BRASIL LTDA. (Brazil)
Sales and after-sales service of AC drives, servo motors and controllers

MOTOMAN ROBOTICA DO BRASIL, LTDA. (Brazil)
Sales and after-sales service of robots

Stock Information

As of March 20, 2013

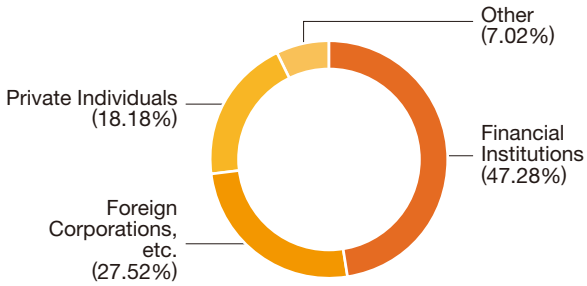
Number of authorized shares	560,000 thousand
Number of shares outstanding	252,331 thousand
Common stock	23,062 million yen
Number of shareholders	20,326
Stock code	6506 (Japan)

Major shareholders

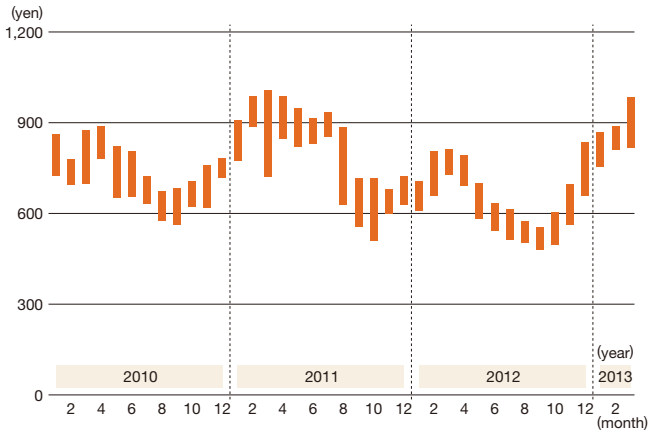
Major shareholders (top 10 shareholders)	Number of shares (1,000s)	Share-holding ratio
Japan Trustee Services Bank, Ltd. (Trust Account)	17,770	7.05%
The Master Trust Bank of Japan, Ltd. (Trust Account)	16,182	6.42%
Mizuho Corporate Bank, Ltd.	8,100	3.22%
Japan Trustee Services Bank, Ltd. (Sumitomo Mitsui Trust Bank, Limited (Employee Retirement Benefit Trust Account))	7,970	3.16%
Meiji Yasuda Life Insurance Company	7,774	3.09%
Japan Trustee Services Bank, Ltd. (Sumitomo Mitsui Trust Bank, Limited Re-trust Account, The Bank of Fukuoka, Ltd. Employee Retirement Benefit Trust Account)	6,375	2.53%
SAJAP	6,240	2.48%
BBH FOR VANGUARD INTERNATIONAL VALUE FUND-EDINBURGH	4,485	1.78%
Nippon Life Insurance Company	4,035	1.60%
STATE STREET BANK AND TRUST COMPANY 505225	3,776	1.50%

Note: Treasury stock is deducted in the calculation of the shareholding ratio.

Share Distribution by Shareholder Type



Company Share Price



Note: The prices displayed are the monthly high and low prices traded at Tokyo Stock Exchange.

The Company's stock has been selected for the Nikkei Stock Average.

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