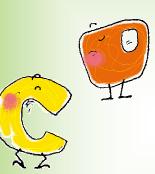
# **Environmental Report2014**

Toward Environmentally Friendly Manufacturing





# **Table of Contents**

From Our Editors	1
Message from the President	2
Company Overview	2
Outline of Our Business	3
Management Philosophy/Environmental Policies	4
Corporate Governance	5
Management System	6
FY2013 Achievement of Environmental Goals and Objectives	8
Environmental Goals and Objectives for FY2014	8
Setting Mid and Long-term Goals for CO2 Reduction	9
Highlights of Our Environmental Activities	10
Controlling Environmentally Unfriendly Chemicals	13
Environmental Conservation Activities	15
Environmental Burden Data	17
Environmental Accounting	20
Environmental Education	21
Numbers of Employees with Certification in the Environmental Field	21
Improve environmental awareness	22
Social Contribution	23
Benefits with Employees	24
Postface	26

## **From Our Editors**

Every year at Cosel Co., Ltd., we are preparing and disclosing Environmental Report so that more people understand our environmental activities.

We are more than happy if this report helps you understand our environmental initiatives and activities. In preparing this report, we have referred to "Kankyo Hokokusho Gaidorain 2007 (Guideline to Environmental Reports 2007)" issued by the Ministry of Environment.

 Organizations Covered by this Report: Cosel, Co., Ltd. Head Office and Plant/Tateyama Plant
 Period Covered by this Report: May 21, 2013 to May 20, 2014 ("FY 2013" in this report refers to above period)
 Issue Date of the Next Environmental Report: July, 2015
 Last Issuance: July, 2013



Taken from our Digital Photo Club

## **Message from the President**

Today, natural disasters maybe be affected by global warming are occurring more often problems such as air pollution, exhausting resources and energy associated with economic expansion in emerging countries have been exposed, and environmental issues have been more serious worldwide. Since the nuclear plant accident happened at Fukushima after the Great East Japan Earthquake, we have experienced a energy supply shortage due to a new direction in our nuclear energy policy. In this situation, sustainable growth and expansion of business will not be accomplished unless we

work on integrating a business management and environmental management.

As a developer and manufacturer of equipment related to electricity, we believe that we can contribute to energy saving for the entire society through our business activities. In particular we are promoting energy saving products for power loss reduction of customer's systems. We also believe that it is our mission and responsibility to pass on this precious earth's environment with healthy conditions to our next generation.

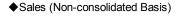
We will strive to continue providing new value obtaining customers' and social needs based on the environmental principle "Harmonize production and product development with environment, endeavor to maintain and improve global environment and thereby contribute to the society." And we aim to become a company to which our customers would say "we would like to use Cosel products" for both the quality and environmental responsibility. Keeping the idea of protecting the global environment and of realizing a sustainable society, we would like to continue to advance as a trusted company. Please feel free to contact us with your honest opinions and input for our further improvement.

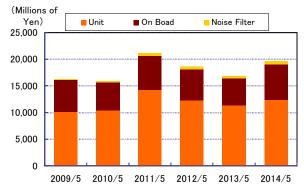
President and Representative Director Masato Tanikawa



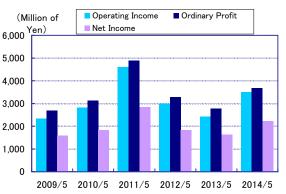
## **Company Overview**

Trade Name:	Cosel Co., Ltd.
■Headquarters:	1-6-43 Kamiakae-machi, Toyama City, Toyama Prefecture, 930 0816, Japan TEL: 076-432-8151
	FAX : 076-441-5324
Business:	Manufacturing and Sales of Electric Devices and Electrical Machine Equipment
Main Products:	Regulated Power Supplies (such as Switch Mode Power Supplies)
Representative:	Masato Tanikawa
Date of Establishment:	July 26, 1969
Paid-in Capital:	2,055 Million Yen
Annual Sales:	19,638Million Yen (Non-consolidated basis for the period ended May 20, 2014)
Number of Employees:	419 (Non-consolidated basis as of May 20, 2014)
■Affiliates:	Taiyoudenshikougyou CO.,LTD. (Tsukioka-machi, Toyama City, Toyama Prefecture)
	COSEL U.S.A.INC. (San Jose, USA)
	COSEL EUROPE GmbH (Frankfurt, Germany)
	COSEL ASIA LTD. (Hong Kong, China)
	Cosel (Shanghai) Electronics Co., Ltd.
	Shanghai Cosel International Trading Co., Ltd.
	Wuxi Cosel Electronics Co., Ltd.

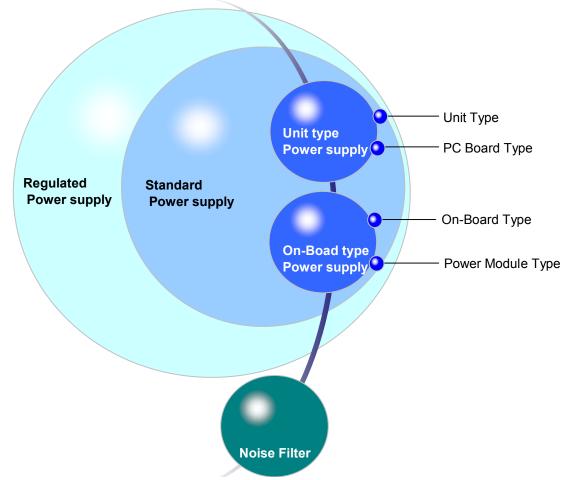




#### Operating Profit/Current Profit/Net Profit for the Period



## **Outline of Our Business**

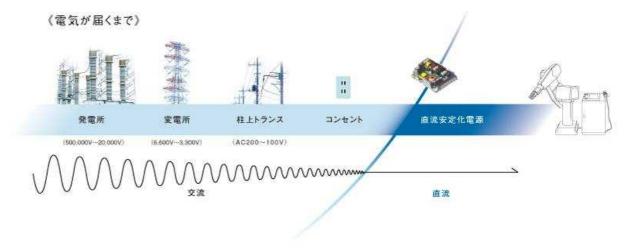


Many electric components including semiconductor devices are used in electronics products such as industrial and commercial equipment. For this equipment to operate, electrical power delivered to factories and households needs to be converted from alternating current (AC) to direct current (DC). Our regulated DC power supplies make this possible.

In particular, switch mode power supplies are our main products. They are used in many electric devices such as information systems, telecommunications, medical and FA equipment because they are compact, light weight and highly efficient.

We can say that switch mode power supplies are the hearts of this equipment and hold a key to the future of the electronics era.

We will continue our dialogue with new technologies and make highly reliable products which will help build the future of electronics.



## **Management Philosophy/Environmental Policies**

#### Management Philosophy

"Responding to the trust of the society by putting Quality as the most important priority"

We are trying to improve ourselves by using the idea and methodologies of Total Quality Management (TQM) based on our management philosophy of "meeting up with expectations from society by putting quality above anything else."

In order to achieve this, we are striving to secure our position in the increasingly competitive switch-mode power supply market by clearly presenting goals and measures and applying them on the company-wide basis to live up to expectations from society by providing attractive products.

Management Philosophy "Responding to the trust of the society by putting Quality as the most important priority"

> Cosel's Charter on Ethic Standards for Voluntary Action Internal Rules and Regulations

Awareness and Sense of Ethics of Individual Employees

Positions of Cosel's Charter on Ethics and Standards for Voluntary Action



Cosel's Charter on Ethic and Standards for Voluntary Action are established so that all the management and employees of Cosel group become fully aware of their social responsibilities, completely comply with laws and regulations in settings of various business activities and act in a socially ethical manner in order to achieve our management philosophy of "responding to the trust of the society by putting Quality as the most important priority" (established in September, 2006).

#### **Environmental Policies**

**Environmental Principle** 

Harmonize production and product development with the environment, endeavor to maintain and improve the global environment and thereby contribute to the society

#### Action Guidelines

- (1) Offer environmentally friendly products.
- (2) Avoid unnecessary consumption of resources and promote reuse of waste.
- (3) Reduce and eliminate the use of environmentally unfriendly chemicals and endeavor to improve the global environment.
- (4) Set and review goals and objectivities to control our activities, work for continuous improvement and prevent contamination.
- (5) Comply with national and local environmental regulations and align with the needs of customers and local communities.
- (6) Enlighten employees about environmental preservation including biodiversity conservation through environmental of all employees.

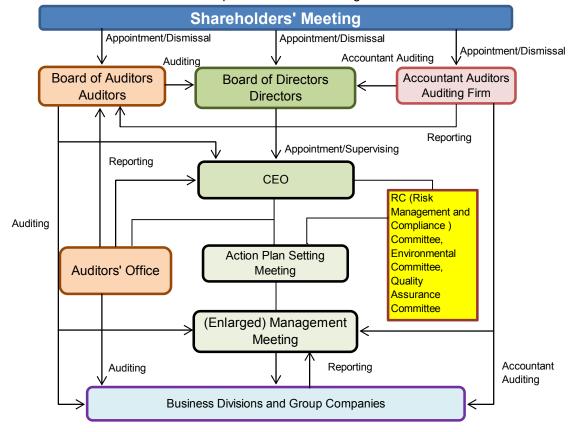
This environmental policies are made public.

Set forth on May 21, 1999 Revised on November 21, 2012 Masato Tanikawa CEO Cosel, Co., Ltd.

## **Corporate Governance**

#### [Basic Concept]

We take corporate governance as important business challenge. We are trying to make our management more efficient; to become a company which lives up to the trust and expectations of various stakeholders. We have adopted the Corporate Auditor System so that we perform better management monitoring and compliance with laws and regulations.



#### < Outline of Corporate Governance Organizations >

# Corporate Governance System

We are adopting the Board of Auditors System. Two of our three auditors are external auditors as defined in paragraph 16, Article 2 of Companies Act. Currently, Cosel does not have any external director. There is no department to support our external auditors.

However, information is conveyed to our external auditors at our monthly board of auditors meeting.

#### [Board of Directors]

The Board of Directors makes decisions on matters as required by laws, regulations and articles of incorporation. The Board also makes decisions on management policies, business operations and checks the execution of duties by directors.

The Board of Directors comprises of seven directors. The meetings of the Board of Directors are usually held once a month. Directors execute businesses in the area of responsibility under the dection of CEO the based on the management policies decided on at meetings of the Board of Directors.

#### [Board of Auditors]

The Board of Auditors is comprised of three auditors; one standing auditor and two external auditors (out of which one is an attorney). They attend meetings of the board of directors and other meetings and audit execution of duties by directors.

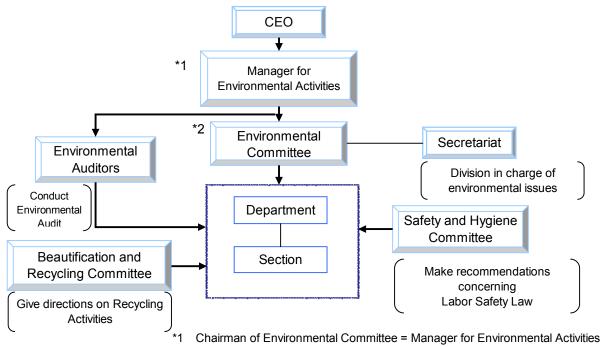
#### [Auditors Office]

Auditors' Office (one person) is established to enhance internal governance function in collaboration with auditors, the Board of Auditors and Accounting Auditors.

## Management System

### Organizational Strucuture

The following is our organizational structure to promote the activities to reduce environmental burdens.

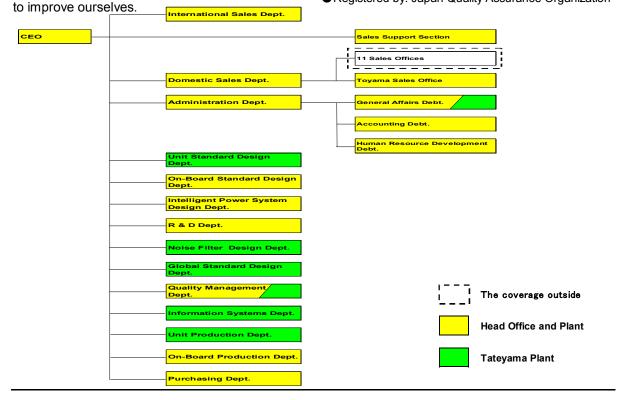


\*2 Made up of major departments

# ISO14001

We are in compliance with ISO14001 at our Head office and Tateyama Plant, and are promoting continuous activities

- Date of Acquisition: December 17, 1999
- •Area Covered: Head Office and Plant/Tateyama Plant
- Registered by: Japan Quality Assurance Organization



## Management System

# Legal Compliance and Others

We are keeping abreast of changes and revisions in environmental laws and regulations which we need to abide by in our monthly environmental management activities. If there are any changes or action required, we inform all employees through our internal Environmental Committee,

Regarding other requests, we input them in our computer system so that all the employees and the relevant can access the infomation.

We consider all the laws, regulations, requirements and evaluation results in our internal rules, regulations and standards then evaluating our legal compliance each year to make sure we do not violate any laws, regulations or requirements.

# Environmental Audit

We are conducting an environmental audit each year to confirm our compliance with ISO14001, implementation and performance status.

Our internal auditors form a team comprising of those who have taken internal and external audit trainings and deemed qualified to audit each department.

Currently, there are 23 internal environmental auditors.

Each auditor reports audit results including areas of improvement to each department manager. Each department reviews their activities and engage in activities for continuous improvement.

In FY 2013, 9 non-compliance cases were observed. Corrective actions were completed for all cases.

## Prevention of Accidents

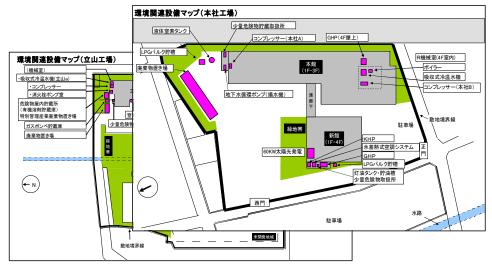
We have developed a "Environment-related Equipment Map" which shows where the environmentrelated equipments is at our Head Office and Tateyama Plant to prevent and detect accidents caused by abnomal operation.

If we determine that a certain equipment needs more control, we check if the procedure set forth in the case of emergency are put in place, and if regular maintenance and measurement are performed. In this manner, we are well-prepared to cope with an unexpected incident.

We have received no complaints from our stakeholders about the environment-related issues in FY2013.

We have confirmed that all our measured environmental data, including vibration and noise level, do not exceed legal and regulatory maximum limits.

(Example) We are checking kerosene and oil tanks every month to see if there is any cracks or damages to prevent soil contamination.



## FY2013 Achivement of Environmental Goals and Objectives

We achieved the targets for the recycling ratio of industrial wastes and for the reduction of power consumption in the specified departments.

We decreased  $CO_2$  emission more than the one in FY2012, however, we could not reach the target for the reduction of  $CO_2$  emission.

As to the items related to new products, we could not have enough record to judge due to product developments delay .

No.	Objectives	Control Item	Results	Evaluation
1	Reduction of power consumption	Amount of $CO_2$ Emission from power consumption per 1 million yen of sales: 0.101t or less	0.104t/million yen	×
2	Reduction of Industrial wastes	Isales: () 40kg or less		×
3	Reduction of CO <sub>2</sub> by	Efficiency improvement of new product A 90% or more	No record due to product developments delay	-
	new products Efficiency	Efficiency improvement of new product B 90% or more	uelay	-
4	Reduction of power consumption in on-board production department	Reduction ratio of Power Consumption in Base Unit 5% or more	14.7%	0

[Results: O: Goals Achieved, ×: Not Achieved]

## **Environmental Goals and Objectives for FY2014**

Progress in each area for FY2014 is confirmed at the environmental committee, which is held every other month.

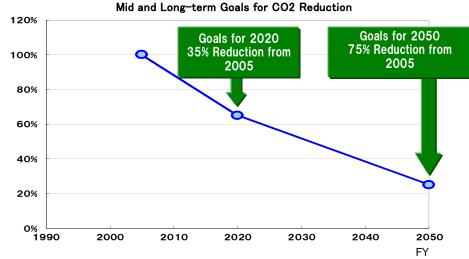
No.	Objectives	Control Item	
1	Reduction of power	Amount of $CO_2$ Emission from power consumption per 1 million yen of sales: 0.101t or less	
2	Reduction of Industrial	Amount of wastes per 1 million yen of sales: 0.40kg or less	
	wastes	Recycle rate: 95% or more	

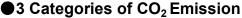
## Setting Mid and Long-term Goals for CO<sub>2</sub> Reduction

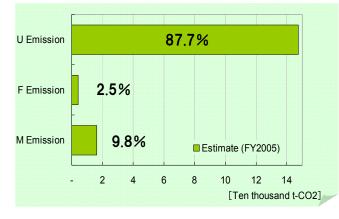
Setting Mid and Long-term Goals for CO<sub>2</sub> Reduction

In FY2009, "CO2 Reduction Project" was launched and mid/long term reduction goals and action plans were established.

To realize the goals and plans, we have developed energy saving products for improving customers' system energy consumption and performed implementations to save daily energy consumption at COSEL facilities.





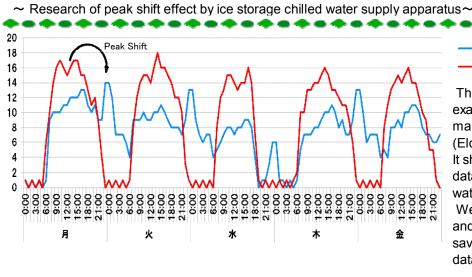


Introduction of Power Monitoring System

The amount of CO<sub>2</sub> emitted directly or indirectly from Cosel was divided into 3 categories.

- U Emission: Emission from Product Using Process
- F Emission: Emission from Factory process
- M Emission: Emission from Materials/Parts manufacturing process

The left graph shows the estimated CO<sub>2</sub> emission as of 2005.





8/6-8/10

Operation Non-operation 8/27-8/31

The chart on the left, it is an example of using an energy management system (Elco).

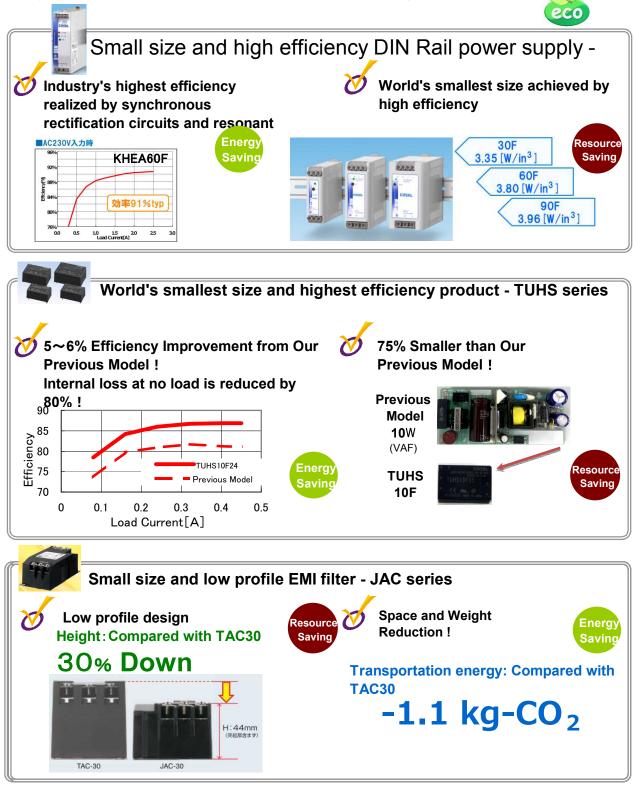
It shows our peak shift effect data of ice storage chilled water supply apparatus. We have created actions and implemented energy saving actions by using the data effectivety.

## **Highlights of Our Environmental Activities**

# Development of Smaller and Highly Efficient Power Supplies

When we develop new products, we conduct their environment assessment from the standpoints of energy-saving, recyclability, use or non-use of toxic substances and environmental friendliness of packing materials to develop more environmentally friendly products.

Furthermore, we have established our internal evaluation criteria based on which environmentally friendly products are recognized and registered as "eco model." We have created the following symbol for to show environmentally friendly models and promote these products to our customers (please see page 11).



# **Highlights of Our Environmental Activities**

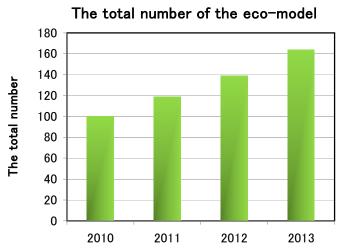
Establishing Eco Products: Environmentally Friendly Products and its Symbol

We have developed a new internal evaluation system on environmental burdens in order to provide our customers with information on our products and our efforts to promote the development of environmentally friendly products since 2010.

We are looking at the following 3 items in evaluating our products to reduce their environmental burdens.

- (1) Environmental burdens generated when our products are in operation at customers' site
- (2) Environmental burdens generated when our products are manufactured at our factories
- (3) Environmental burdens generated when materials and components we purchase are manufactured.

Based on the above 3 items, we set our own criteria to certify and register products which satisfy our criteria as "Eco Products." These Eco Products are highly efficient in reducing environmental burdens. To promote Eco Products, we developed the following symbol which represent Eco Products





Cosel Co., Ltd. Eco Product Symbol Mark

We will proactively expand our Eco Products to create an environmentally friendly low-carbon recycling-oriented society and to continue to grow with our customers.

This symbol mark is used in our product catalogue on pages covering Eco Products to provide information to our customers.



Example of a page in Our Catalog where this Symbol Mark is Used

# **Highlights of Our Environmental Activities**

### Reducing Environmental Burden in Production Floor: ~Reducing power consumption by compact size soldering pots~

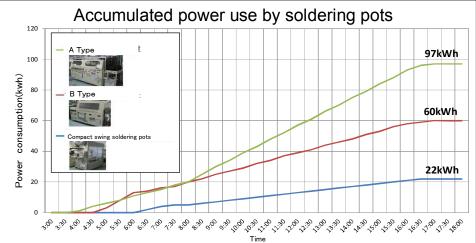
Developing automatic soldering

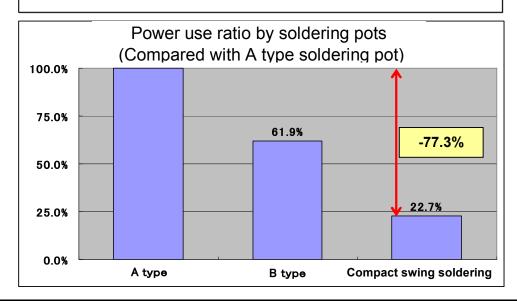
We have been developing and improving compact automatic soldering equipments for reducing assembly cost by 50%. Equipment cost: 50% decrease over the current cost Soldering time: 50% decrease over the current soldering time

Item	B Type machine	Compact swing soldering pots	Reductin ratio
Cost	100 (Index number)	49 (Index number)	51%
Soldering time	120 (second)	52 (second)	57%
Area	1,885 (m <sup>2</sup> )	<b>1,425</b> (m <sup>2</sup> )	24%



## **Reduction Power Consumption**





## **Controlling Environmentally Unfriendly Chemicals**

EU RoHS Directive (\*1) came into effect on July 1, 2006. Cosel had achieved 100% compliance with RoHS Directive in February, 2006 (\*2).

REACH(\*3) and PFOS came into effect in FY2007 and FY2008, respectively. Requirements to control environmentally unfriendly chemicals became even stricter. We have established the systems to control environmentally unfriendly chemicals and using these systems so that environmentally unfriendly chemicals are not used in our products.

# Green Procurement

At Cosel, we are facilitating "Green Procurement" in which we procure environmentally friendly components and materials in order to deliver environmentally friendly products to our customers.

We have defined "prohibited materials," "materials targeted for elimination" and "materials targeted for reduction" for components and materials which are used in our products. By doing this, we can prevent the entry of environmentally unfriendly chemicals into our products.

### Education on Environmentally Unfriendly Chemicals

In FY2006, we conducted an educational campaign on environmentally unfriendly chemicals.

This included people working at our headquarters and Tateyama Plant, but also people who are involved with Cosel's products at our contractors and at transportation companies. All participated in our test and training sessions.

Using a training material developed by our department which is responsible for environmental issues, training sessions were held by department and tests were given to participants to check their understanding about environmental issues. This enabled them to deepen their understanding of the objectives and the importance of managing environmentally unfriendly chemicals as well as activities taken by Cosel.



# Supplier Management

We are evaluating the environmental risk of environmentally unfriendly chemicals by our suppliers and ranking them at 3 levels.

This ranking is used for the "Measurement of Environmentally Unfriendly Chemicals of Purchased Materials" and "Audit of Suppliers' Management of Environmentally Unfriendly Chemicals." This ranking is reviewed once a year.

Under this system, we audit and review how environmentally unfriendly chemicals are controlled by high risk suppliers and how highrisk components and materials are controlled by suppliers. We also facilitate registration of highrisk suppliers, materials and components.

(\*1)What is RoHS Directive?

RoHS Directive is an EU directive that restricts the use of certain hazardous materials in electrical and electric equipment. The use of six substances, mercury (Hg), cadmium (Cd), lead (Pb), haxavalent chromium (Cr6+), polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), will be prohibited from July, 2006.

(\*2) Excluding Maintenance Items

#### (\*3) What is REACH?

REACH is a regulation in which manufacturers or importers of chemical substances are obliged to register and evaluate chemical substances in manufacturing or imported and, in the case of chemical substances of very high concern, an authorization from relevant authorities is required and high risk substances are subject to limitation including ban. REACH entered into force in June 2007.

## **Controlling Environmentally Unfriendly Chemicals**

# New Components, New Products and Mass Production Management

Since FY2006, we have been conducting fluorescence X-ray tests (\*4) by target measurement area to prevent the entry of environmentally unfriendly chemicals into our products. The fluorescence X-ray test allows us to confirm and verify whether or not a component is complying with our "Green Procurement Standards."

The evaluation is performed at the following 3 levels.

We have four X-ray fluorescence instruments in total, two units at our headquarter plant and another two at our Tateyama plant.

#### **New Product Launch**

In the past when we adopted a new component, we conducted a "Quality Evaluation" to prevent the use of defective components. However, we decided to conduct fluorescence X-ray tests for mass production components to check the presence of environmentally unfriendly chemicals in newly adopted components. Test results are compared to the data about environmentally unfriendly chemicals which are submitted from suppliers before components are officially registered.

#### Acceptance of Purchased Components

We also conduct fluorescence X-ray tests in accordance with the risk rank when we accept purchased components.

#### After Mass Production Started

After we start mass production, we evaluate the presence of environmentally unfriendly chemicals to make sure if Green Procurement Standards are observed on an ongoing basis, in addition to our longstanding electrical quality and mechanical quality evaluations.

(\*4)What is fluorescence X-ray test? It is an analytical method in which information on the existence of an atom is acquired based on the wavelength of a specific X-ray and the intensity of the energy of the Xray which is generated when X-ray is irradiated to an atom which comprise molecules.



#### Management of Production Lines

#### \*

+"

In order to prevent the entry of environmentally unfriendly chemicals into our products, RoHScompliant products and non-RoHS-compliant products are manufactured in separate lines on our production floor by using separate equipment, jigs and tools.

Equipment, jigs and tools for soldering process are identified by signs and labels as shown in the following pictures.



Indication of Lead-free Solder Indication of Pb Solder



Indication of Soldering Equipment

## **Environmental Conservation Activities**

## 1. Energy Saving

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*

87% of the energy Cosel consumes is electric power. Since the inception of the Company, all our fluorescent lamps at our production floors and offices have had pull switches to reduce the amount of power consumed. We are making sure that lights are turned off during breaks and when not in use.

Furthermore, all the personal computers used at Cosel are set in the energy-saver mode and their monitors are automatically turned off when not in use. We are always taking small but important measures.

#### Cutting Down Power Consumption of Computers

The entire company has adopted a power-saving configuration in which a monitor goes off and a computer goes to a stand-by mode when it is not in use for a certain period of time.

Power switches are provided for each computer or for each area so that when somebody goes home, he or she can turn off the power to reduce power consumption of computers not in use.



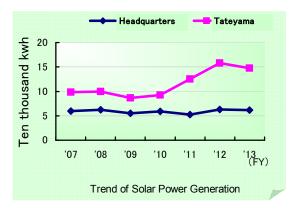
# 2. Use of Renewable Energies

- · FY2002 60kw solar power generator was installed at the rooftop of the new headquarters building
- In FY2004, 50kw solar power generator was installed at the rooftop of the Tateyama Plant
- In FY2006, 50kw solar power generator was added at the rooftop of the Tateyama Plant
- In FY2010, 50kw solar power generator was added at the rooftop of the Tateyama Plant The impact of these generators is about 200,000kwh annually (CO<sub>2</sub> emission of about 84t-CO<sub>2</sub> reduction).



Solar Panels at New Headquarters

Solar Panels at Tateyama Plant



# 3. Reduce

#### • Reduction of Use of Air Cap Bags for Packing

Air cap bags were used when we send transformers and sheet metals,or other items . to contract manufacturers. Once packages are opened at contract manufacturers' sites, the air cap bags were disposed as industrial waste.

We reduced the use of air cap bags by changing our packing methods using reusable Tupperware and other containers.

Unpacking at contract manufacturers' sites also became more efficient.

(This is one example of our QC circle activities)



Reusable Tupperware and Container

## **Environmental Conservation Activities**

#### Elimination of Styrofoam

We had been using styrofoam as a buffer material for the shipment of our products because it was cheap and excellent to protect our products. After being used, it had been discarded as the industrial waste.

We have replaced plate-shaped styrofoam with cardboards and small styrofoam balls with biodegradable resin in order to reduce industrial wastes.

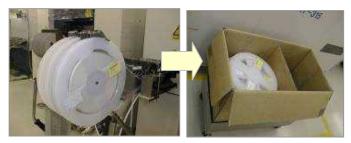


#### Reuse of Tape Reels and Semiconductor Sticks

We use chip components in our products. These chip components are shipped from manufacturers on plastic reels.

When they are used up, empty reels are left, which use to be discarded as industrial waste. This was a sizable amount of industrial waste. Some semiconductors come in plastic sticks when shipped from manufacturers. These sticks had been discarded once the semiconductors were used up just like the reels.

Because they do not get deformed or worn after use, we have changed our procedures to reuse them by having manufacturers collect them after use.



#### Reuse of Used IPA

We use isopropyl alcohol (IPA) as a diluent for fluxes which are used in soldering our products. We also use IPA for cleaning of jigs and tools.

In 2010, we introduced IPA recovery equipment to recover used IPA and reuse it . As a result, we were able to reduce the amount of chemical substances.





IPA Regenerator

Regenerated IPA

# 5. Recycle

#### Recycling of Waste Products and

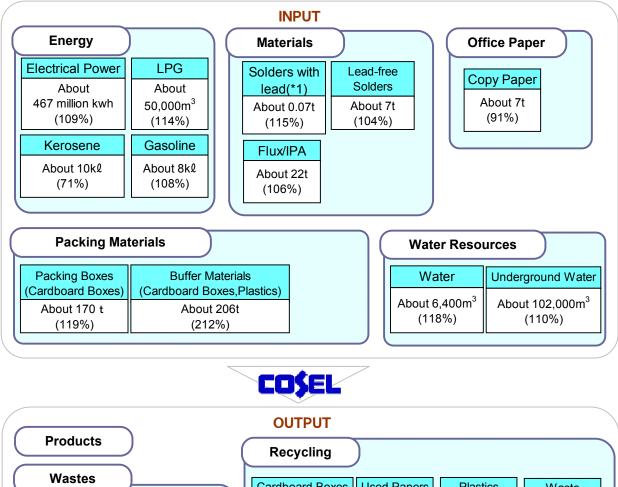


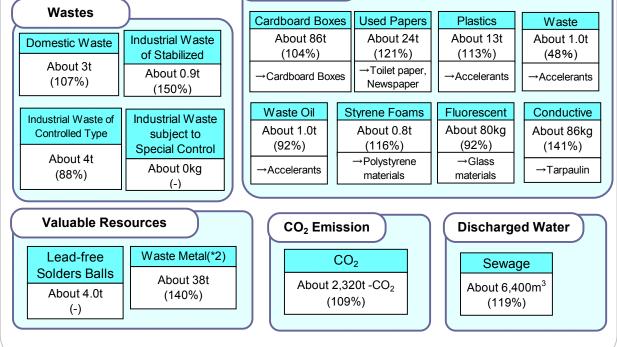
Defective products, unusable bottom plates and dummy circuit boards that were cut off in the production processes had been discarded as industrial waste.

Now we are dividing these wastes into metals, plastics, or other before disposing of them so that they can be used as ingot and furnace combustion improver.

# Environmental Burden Data

Every year, we at Cosel are investigating the environmental burden in our business activities for control purposes. () YoY Jan, 2013 to Dec, 2013

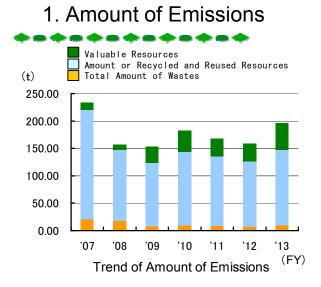


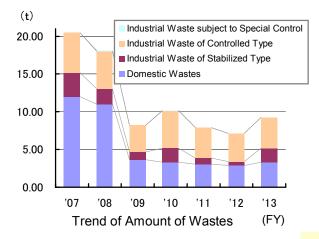


(\*1)Became completely lead-free

(\*2)It is changed from recycling to valuable resources

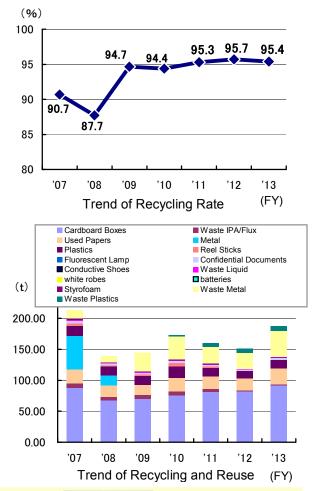
## **Environmental Burden Data**

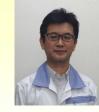




Many types of wastes are generated in our business activities. Many of them are recyclable, if we segregate them properly.

We at Cosel, Environmental Committee and Beautification and Recycling Committee are working together in such activities as making sure wastes are properly separated and emissions are reduced. \*Recycling Rate (%) = Total Amount of Wastes collected for Recycling and Reuse and Valuable Items for FY (kg)/Total Emission Amount for FY (kg) \*100





Chairman of Environment Committee *Masanori Ishii* 

In the environment committee, we have been working on 3 activities as the focus items in FY2013:

- 1. Reducing CO<sub>2</sub> emission
- 2. Increase recycling ratio

3. Complying with environmental related laws and regulations.

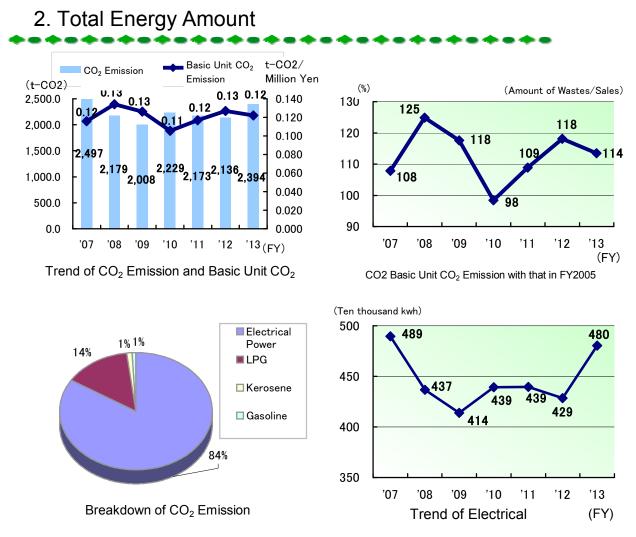
Results of each items are:

1. We promoted an energy saving plan for "Reducing CO2 emission" with the energy saving subcommittee.

- 2. We achieved 95% or more recycling in FY2013.
- 3. We worked on the activities complying with
- environmental laws and regulations.

We are continuing to undertake activities focusing on major items.

## **Environmental Burden Data**



As we mentioned before, 84% of our  $CO_2$  emission comes from electrical power consumption. In order to reduce this, the Environmental Committee is playing a central role in implementing many activities.

As for our total energy use (crude oil equivalent) as a business operator under Law Concerning the Rational Use of Energy was 1,389kl, which was not subject to notification requirement. However, it is assumed that our energy use will exceed the 1,500kl criteria within a few years. Therefore, we have taken the Energy Management Training. We have also confirmed that we are not a specified consigner as defined by Law Concerning the Rational Use of Energy.

# 3. Amount of Environmentally Unfriendly Chemicals

Among chemical substances handled by Cosel, Class I Designated Chemical Substances whose handling amounts are subject to notification requirement with PRTR are "lead and its compounds." However, lead solder which falls under "lead and its compounds" is not subject to the notification requirement because we have already changed all of our solder to lead-free solder.

# **Environmental Accounting**

Environmental Conservation Cost

Covered Area: Head Office and Plant, Tateyama Plant Unit: Thousands of Yen

	Category	Description	Investment	Cost
(1)	Cost within business area Cost incurred to curb environmental burden through	n production and service activities implemented within	business a	reas.
	①Pollution prevention cost		0	0
	②Global environment conservation cost		0	11,994
	③Resource circulation cost		0	2,074
(2)	Cost at upstream and downstream Cost incurred to curb environmental burden generated at upstream and downstream of production and service activities.	(Cost) Green procurement Controlling Environmentally Unfriendly Chemicals	0	42,032
(3)	Management cost Environmental Conservation Management Cost	(Investment)Power Monitoring System (Cost) Management of Environmental activities. Monitoring and measuring data from facilities with Environmental burdens. Handling of Responses to Survey on Chemicals.	0	18,800
(4)	R&D cost Environmental Conservation R&D Cost	(Cost)Research and development of the environmental conservation products	0	104
(5)	Social activities cost Environmental Conservation Cost for Social Activities	(Cost) Sponsoring Environment-related radio program	0	0
(6)	Environmental damage control cost Cost to Control Environmental Damages	-	0	0
		Total	0	75,005

\* Environment Conservation Cost includes depreciation of capital investment of the past year and labor cost.

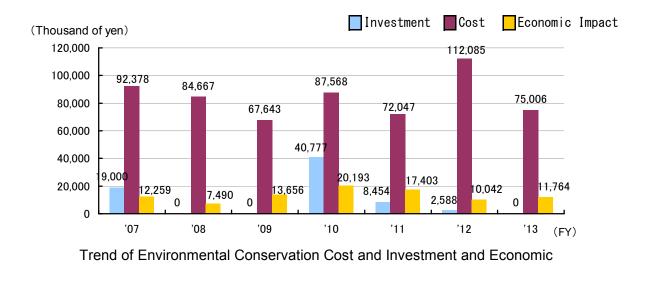
Environmental Conservation Effect (Substance Volume)

Item	Effect
CO <sub>2</sub> Reduction	
(Reduction of power consumption with	88(t-CO <sub>2</sub> )
photovoltaic power generation and energy	00(1-002)
saving measures)	
Effective Use of Wastes	
(Amount of recycle, reuse and valuable	187(t)
resources)	
Reduction of quantity of IPA use	▲0.3(t)

Environmental Conservation Effect (Economic Impact)

ltem	Amount
Savings from power usege reduction	154
Reduction of waste disposal cost contributed by	0
the recovery of valuable resources	0
Proceeds of sales of recyclable items	11,610
(valuable items)	11,010
Total	11,764

\*Economic effect based on assumption such as risk avoidance (expected effect) is not posted as effect.



## **Environmental Education**

For the purpose of Environmental Management, we have clearly identified types of the training needed. We are offering;

(1) General trainings to raise awareness among employees about Environmental issues.

(2) Professional trainings to improve technical skills in specialized areas as shown below.

(3) Training on environmentally unfriendly chemicals (see page 13)

(1) General trainings cover all the employees, including part-timers, temporary employees, if engaged for a certain period. As for the new employees, they are trained at first. If they do not understand enough, they will be trained till satisfaction.

List of professional

No.	Operation	Description of training	The concerned	
		<ul> <li>How to dispose of solder wastes</li> </ul>		
1 Soldering		<ul> <li>Check soldering machine</li> </ul>	Persons who handle them	
		Emergency measures		
		<ul> <li>How to dispose fluid containing flux and/or</li> </ul>		
2	Treatment of waste organic solvent	IPA		
		<ul> <li>Emergency measures</li> </ul>		
3	Paper work concerning industrial waste	How to process industrial waste control 3		
5	i aper work concerning industrial waste	slips (manifest)		
	Confirmation of revision of and	How to confirm the revision of, and evaluate		
4	Evaluation of compliance with	compliance with environmental laws and		
	Environmental laws and regulations	regulations	People in charge of relevant tasks	
5	Observe nitrogen gas filling	<ul> <li>Check when observing liquid nitrogen filling</li> </ul>	Feople in charge of relevant tasks	
5	Observe filti ögen gas lilling	Daily check		
6	Controlling chemicals and hazardous	Control methods based on internal		
0	substance	regulations		
7	Confirmation of kerosene tank check results and emergency response	How to train, provide hands-on exercises and check understanding based on "Kerosene Tank Control Procedures (PEC018)."		

### Numbers of Employees with Certification in the Environmental

We are encouraging employees to be certified with the environmental field and trying to increase the number of certified employees.

As of today, the following numbers of employees have the certifications in the environmental field.

No.	Name of Credentials		Number of Credential Holders
1	Hazardous materials security superintendent	1	8
2	Class B hazardous materials engineer	19	<b>R</b> 2222222222
3	Class C hazardous materials engineer	10	2
4	Chief of lead	4	1111
5	Chief of organic solvent	13	<b>R</b> 111
6	Special controlled industrial waste	5	22222
7	Chief of specified chemical substances	0	No pertinent substances exist
8	Class I health officer	9	****
9	Safety officer	2	22
10	Fire prevention manager	8	2222222
11	Eco test	66	<b>222222</b> 2222222
12	ISO internal environment auditor	23	

## Improve environmental awareness

## Visiting a company collecting wastes and processing recycle

In November, 7 members of Cleaning and Recycling Committee from Headquarters and Tateyama visited a company to which we subcontract waste collection and processing recycle.

We confirmed process of our wastes and outline of its process. We, members of Cleaning and Recycling Committee, renewed our awareness of the environment after discussing how we could increase recycling ratio.



Global Standard Design Dept. Naoki Fuiita I visited a recycling facility for the first time. I saw that the company separate wastes further after collection part of the separating process is performed manually. I found many people are involved with recycling. I could learn recycling and disposal system of a variety of wastes and how important separating wastes is. I am trying to make a thorough separation of wastes.



Beverage vending machines are installed in our premises. Used plastic bottles are separated into exterior films(labels), caps and bottles (main bodies) before being discarded.

We are trying to improve environmental awareness through an easy-to-do environmentally friendly activity.



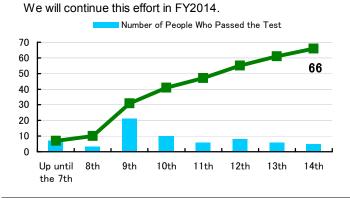
# Encouraging taking Eco Test: Developing People who Work on Environmental Issues

Eco Test (officially known as Certification Test for Environmental Specialists) is a certification test run by the Tokyo Chamber of Commerce in order to develop people with a wide range of knowledge who can play a leading role in tackling environmental issues and facilitate the realization of a sustainable society where we can protect environment

and achieve economic growth at the same time.

Cosel's employees started to take the test from the 6th test and 66 of them have passed the test so far.

We are encouraging our employees to take the test by subsidizing a the test fee and making those who passed the test eligible for certification reward money.





Saitama Sales office Junko Seto ( Passed the 15th Test)

I am surprised to find that we are exposed to a various of environmental problems, which I felt ashamed because we are part of problems. As I have been certified with "eco people," who passed the eco certificate exam, I realize the responsibility and contribution as a social person, behave with care, and work on improvement. I would like to become a sales person who offers products and services with the customers environmental point of view.

# **Social Contribution**

# JEITA Toyama District Manufacturing Class





On May 31, 2014 (Saturday), "7th JEITA Toyama District Manufacturing Class" was held at Hokuriku Denki Kogyo (in Osawano Town). 33 students in grades 5 and 6 from nearby elementary schools participated in the class and engaged in an electrical engineering project under the theme of "Let's make an electrical organ."

Cosel has been participating in this class since the 1st class was carried out. Our employees served as instructors and gave students advice.

Children seemed to struggled with the unfamiliar tasks of assembling and soldering, but we received such feedbacks as "It is very interesting!" and "It is very fun to do. I would like to do this again."

**What is JEITA?** 

Japan Electronics and Information Technology Industries Association.

An organization composed of manufacturers and sellers of such products as electrical and electronic equipment, electronic devices, electronic components, electronic materials and software.

# Cosel Cup Challenge Super Kids

This is our 26th anniversary since we became a special sponsor for a sporting event for boys and girls in grades 4 through 6. This event was hosted by a local TV station.

About 319 children in Toyama prefecture participated in 5 events ranging from 100-meter sprints, ball throwing, broad jump, zigzag dribbling and swimming.

Due to family and friends cheering, they broke three meet records this time.





Proceeds from the sales of our internal bazaar and contributions from our employees are donated to Toyama Prefecture Cooperative Donation Society.

Donation amount is approximately 50,000 yen per year. It is used for home-based service, volunteer training, accident prevention programs for children and fostering and nurturing of young people.

# **Benefits with Employees**

# Human Development

#### [Our Philosophy on Training]

We believe that people are our most important assets and developing human assets is the driver for our growth.

### [Basic Educational Policies]

Based on the above philosophy, the following basic educational policies are set forth.

- 1. Invigorate workplace
- 2. Improve leadership
- 3. Acquire necessary knowledge and techniques to become more capable
- 4. Develop skills for the operation and maintenance of an appropriate quality system
- 5. Be aware of the need of an environmental management system and develop skills for its operation and maintenance

### [Educational Activities]

The Educational Committee is playing a central role in planning and implementing various training and educational events in collaboration with other related departments.



Member feedback of DP workshop (Re-form staff consciousness)

### **Company Newsletters**

#### [Purpose of Company Newsletters]

Newsletter Committee is playing a central role in issuing Company Newsletters twice a year, hoping that they will provide topics of conversation and serve as lubricant, making Cosel a company that everybody feel fortunate to be a part of.

### [Topics Covered]

Our newsletters cover a wide range of topics including topics related to our workplaces, club activities and hobbies which employees are proud of.

Every issue of our newsletter provides enjoyable topics, sometimes revealing our colleague' hidden talents and sometimes showing us hidden less pretentious side of our usually naggish bosses.



Cover of company newsletter issued in FY2013

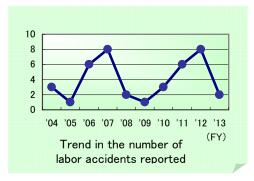
## **Benefits with Employees**

Activities for Labor Safety and Hygiene

Safety and Hygiene Committees organized separately for the headquarters and Tateyama Plant are taking a lead and conducting a safety and hygiene patrolling for the purposes of maintaining and improving the safety of work environment (bimonthly).

When a problem is found as a result of the parole, a recommendation for improvement is issued, upon which a relevant department takes actions and reports back to the committee.

The number of labor accidents in the past 5 years is as follows.



### **Club Activities**

\*\*\*\*\*\*\*\*\*\*\*\*\*

We have 11 clubs, both culture-related and sports related. The members of these clubs extend friendships to each other through common hobbies. There are 15 members in a cycling club and they take part in events held nationwide. They mainly participate in "Long ride event," and try to finish driving a 100 to 200km course within the time limit. They also participate in local events such as "Granfond Toyama" and "Tateyama alpine hill climb" as both athletes and volunteers. Promoting health in body and mind, they are promoting the spread a bike culture as transportation with less environmental burden.



Cycling club members

## Work and Life Balance

It is very challenging to raise children in single or dual-income families. This is one of the factors which invited declining birth rates and decreasing population of children. In this environment, one of the social responsibilities of businesses is to "support life and work balance" for their employees.

# [Promoting the use of shorter work hours for child care system]

Employees who are raising children in the 6th grade or younger (as of the end of March of a fiscal year) can work shorter hours within the prescribed hours under our flexible work hour system.

# [Encouraging Employees to Use Planned Paid Days Off]

Our internal rule stipulates that we have to use at least of 2 days of paid days off every half-year term.

By working efficiently, having good communication with our bosses and colleagues and using paid days off in a planned manner, we would like to achieve a good life-work balance and personal development and freshen up ourselves.



On-Board Standard Design Dept. *Misato Kajii* 

I have short work hours in 30 minutes each of the start and finish time. I am so grateful that everyone understands it. You may think 30 minutes is very short, however, it is very precious for me to keep working while raising a child. Having open time makes me relax in mind, and my child gives me full smile. I do my work and raise a child obtaining energy from my child's smile.

# Postface

Thank you very much for reading our "Environmental Report 2014."

Since we started to issue "Environmental Report" in 2000, we have expanded the coverage of our articles by adding articles about our social activities in addition to environmental activities in order to bring a better disclosure.

As a part of corporate social responsibilities, we will make our company-wide efforts to achieve our goals and disclose our activities.

July, 2014 Cosel, Co., Ltd. Quality Management Dept. Quality Management Div.3 http://www.cosel.co.jp/en/

