

RISO KAGAKU CORPORATION

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Sustainability Report 2017





Providing Products and Services that Improve Customer Convenience while Reducing Environmental Burdens

Guided by the RISO Environmental Charter, which emphasizes contributing to global environmental protection and ensuring a sound environment for the next generation, RISO strives to reduce the environmental burdens associated with its operations.

In the course of our operations as a manufacturer, including the development, production, and sale of products, as well as in our customers' use of our products, we consume natural resources and generate waste. We believe that it is our responsibility to recognize this fact, and to create and continue to supply our customers with products and services that improve convenience while reducing environmental burdens.

RISO released the ORPHIS FW series and GD series high-speed color printers in 2016.

Our high-end ORPHIS GD series breaks our previous record for the world's fastest printers, offering high-speed color printing at 160 ppm. The speedy and economical GD series makes color printing more accessible, which revolutionizes the office work environment.

Our products are made to be environmentally friendly from the design and development stages, with hardware and supplies (such as ink) that reduce resource use and exert minimal impact on the environment. The ORPHIS FW series received the Product of the Year award at the 2016 Eco Mark Awards sponsored by the Japan Environment Association because it met the strict Eco Mark Standard related to the VOC diffusion and energy efficiency.

CONTENTS

Message from the President

- Creating Fundamentally Unique Products: Quality and Environmental Consciousness
- 3 Focus 1 RISO's Proprietary Technologies Lead to the World's Fastest Printer
 - Focus 2 Creating a Safer, More Comfortable Office Environment

7

5 Environmental Management 9 Environmental Activities 11 Engagement with Society

13 Overseas Activities 16 Manage

We will continue to develop products and services that increase convenience for customers while reducing environmental impact.

This report outlines our environmental initiatives, our relationships with customers and other stakeholders, and our compliance and corporate governance framework—which is the very bedrock on which all the structures of our corporate activities are built. As always, we appreciate you taking the time to read through this report.

> July 2017 Akira Hayama President and C.E.O. RISO KAGAKU CORPORATION

ment	17	About RISO KAGAKU	19
		Editorial Policy Third-Party Evaluation	21 22

Creating Fundamentally Unique Products: Quality and Environmental Consciousness

RISO contributes to the building of a sustainable society by creating high-performance, highly environmentally friendly products that bring worldwide customers streamlined work processes and greater energy efficiency.

RISO Honored for Continuous Efforts to Achieve both Product Performance and Environmental Performance

2016 Eco Mark Awards judges' comments:

- Advanced collection and recycling of used ink cartridges and used products
- ★ Easily satisfies energy consumption standards under the International Energy Star program
- * Satisfies VOC diffusion criteria, something difficult for a high-speed printer to achieve
- ★ Obtained certification for Germany's Blue Angel by using the mutual recognition agreement
- ★ The later-released high-end products^{*1} broke RISO's own record for the world's highest printing speed*2
- *1 ComColor GD 9630 and 9631
- *2 As of September 2016 for office co sheet-fed printing (cut paper) (RISO data



Presentation by RISO developers

Akira Havama, RISO president & CEO (left) with Akio Morishima president of the Japan Environment Association



Focus **2**

rietary Technologies Lead to the World's Fastest Printer Page ating a Safer. More Comfortable Office Envi nt Page 7

ORPHIS FW







A4

RISO's Proprietary Technologies Lead to the World's Fastest Printer

RISO sought high-speed, multi-page printing, and economy in coming out with a color printer capable of 160 ppm, the world's fastest. High-speed color printing opens up a new world of possibilities.

Amazing Printing Speed Means Greater Productivity

With the high-end ComColor GD 9630, the follow-up series to the Eco Mark Award-winning ORPHIS FW, we achieved a printing speed of 160 ppm and broke our own record for the world's fastest printing speed.

Being able to print documents at four times the speed of conventional office color printers, which have a speed of 40 ppm, means dramatic time savings in the printing workflow. Users get the ability to print out all kinds of documents—presentation and conference materials, ledger



sheets, or teaching materials—with crisp text and distinct color and in a shorter time, making for greater productivity in the office.

ComColor GD9630



RISO's High-Speed Printing Technologies Change the Way You Think About Color Printing

RISO overturned the accepted idea that color printing was not only time consuming but also expensive. The ORPHIS series, high-speed color printers have brought color printing within everyone's reach in the business. These printers incorporate all of our technologies and know-how. Bringing together our expertise in chemistry, mechanics, electrics, and software, we have realized a compact printer for the office that offers speed equivalent to that of industrial printers. Such high-speed printing technologies are the result of our dedication to the in-house development of everything from the printer unit itself to the ink it uses.

In-line Inkjet Print Heads

Four or five in-line inkjet heads arranged in parallel allow speedy full-color printing of A3-size short-edge paper. Ink is applied accurately to each sheet of the paper that passes through the system at high speed. In the system, paper never stops below the print head, and provides high-quality reproduction of color output.



Oil-based Ink Ideal for High-speed Printing

With standard water-based ink, commonly used in conventional inkjet printers, the paper absorbs the water, resulting in deformation such as paper waves and curls, which potentially can cause paper feeding issues during a high-speed transfer of the paper.

The ComColor, on the other hand, uses dedicated oil-based pigment ink developed by RISO. Since it does not cause deformation of the paper, it allows smooth transfer of the paper and thus is ideal for high-speed printing.

Oil-based pigment ink also dries quickly and boasts superior fixation, resulting in less bleeding and see-through, and facilitating high-speed duplex printing.





Water-based ink results in deformation such as swelling and waviness

Oil-based ink causes minimal paper deformation

Precise High-speed Transfer Mechanism

The reliable paper-feeding mechanism paves the way for high-speed printing with accurate print positioning. Paper-feeding speed is intelligently controlled according to how much ink sprays from the print head, which reduces uneven text and images during high-speed printing. In addition, multiple sensors help to constantly adjust the speed to avoid paper being fed too slowly or too quickly.

High-speed printing is the result of combining numerous RISO technologies: multiple sensors that detect the paper transfer situation and adjust the timing accordingly; transfer control that minimizes load on the paper; and shorter intervals between each sheet transferred.

Straight Pass Method



Environmentally Conscious High-speed Inkjet Printers

The ComColor high-speed color printers use an inkjet system that does not require heat when fixing images on to the paper. Therefore, electricity consumption tends to be low, at less than 1,200W during operation, and users can utilize a regular 100V AC power outlet. For the ComColor GD series, even when printing at maximum speed, 160 ppm, the TEC value* is 9.6Wh/week or less, or 0.15Wh or less per page.

Our Inkjet printing system does not require any warm-up time, which is needed in most standard page printers. The printer wakes up immediately from the sleep mode and is ready to print, so the printer can be kept in energy-saving mode when not in use, which contributes to keeping down the overall energy consumption.

With ComColor high-speed color printers, users can process printing jobs in minimal time, even when there are multiple printing jobs lined up on the printer's job queue. This improves the overall productivity of the office and increases the efficiency, consequently reducing the use of indirect energy consumed by inefficient work process such as overtime.

ComColor high-speed color printers work fast enough to handle large-volume print jobs that are typically handled by multiple printers. Centralizing operation at one high-speed color printer, reduces the number of printers needed in the office and thus saves space, lessens office equipment maintenance costs, and minimizes standby power consumption.

* Typical Electricity Consumption (TEC) value: The TEC value serves as a reference value in order to comply with the International Energy Star Program under Japan's Minister of Economy, Trade and Industry (METI).

High-speed Printing Eliminates Backlog, Improves Work Processes,

User's Comment

and Reduces Costs

We print out large volumes every day and we often had to work overtime just to wait for the print job to be finished. To solve this problem, we got a demonstration machine of ORPHIS FW5230 installed at our office to try and before long we noticed it was indispensable. Large-volume print jobs were finished in almost no time and our employees

no longer had to do overtime. Color printing was also inexpensive, which made our total printing costs go down by 50%.

> Masafumi Someya Manager, Management Planning Group For needs Co., Ltd.



We did a thorough revamping of the entire production process for the ComColor in order to reduce the amount of potentially harmful chemical diffusion from parts, materials, and ink raw materials.

A Safer, More Comfortable **Work Environment**

Focus 2

A variety of volatile organic compounds (VOCs) are used in paint, printing ink, adhesives, detergents, and other substances. This is because of VOC characteristics such as easy vaporization (drying) and a good affinity to oil (i.e. are easy to use in solvents, easily clean away oil).

VOCs contain substances harmful to human health, such as styrene and benzene. In addition, there are a variety of VOCs whose effect on human health is unknown. To protect people's health and contribute to a safe and comfortable office environment, it is crucial to reduce whole-room VOC content (TVOCs: total volatile organic compounds).

Overcoming the Challenges of High-speed Printers

As global environmental awareness increased, in April 2014 the Eco Mark standards related to TVOC diffusion were revised and became stricter. The standard measures the TVOCs diffused in a fixed time from the printer's main unit and from the printed materials, making compliance difficult for a high-speed printer, which outputs large amounts in a short time.

Development and Production Divisions Combine to Reduce Diffused TVOCs

With the goal of reducing TVOC diffusion, the development and production divisions of RISO decided to focus their resources to analyze and identify the individual sources of VOCs and take appropriate measures.

VOC Reduction Measure 1: **Developing Ink for the New ORPHIS**

We revamped our process for producing ink starting with raw material selection, choosing ones with minimal VOCs. We also incorporated new technologies in the ink production process. The result was ink that diffuses fewer VOCs.



Developing ink with lower TVOC diffusion

What Is VOC?



VOC Reduction Measure 2: **Use New Materials for ComColor Parts**

Organic solvents are used to make many kinds of parts softer and to improve the formability of certain materials. In addition, if raw materials for ink are changed, parts whose materials match the characteristics of the ink must be found. We confirmed the raw materials contained in each of the thousands of printer parts, and then we chose materials that diffused less VOCs and were chemically compatible with the ink.



Some of the parts in a printer

VOC Reduction Measure 3: dentify and Eliminate VOC Sources in Production Proces

A variety of chemicals are used in production processes such as treating and cleaning parts. We checked if there were chemicals that emitted VOCs during the production processes in our company as well as our suppliers. When we found them, we stopped using them or took other measures against them.

Tireless Research and Measures Lead to Dramatic Reductions in TVOC Diffusion

The three measures mentioned above took us 18 months to complete. As a result of comprehensive efforts including those of Main unit our parts manufacturers, we achieved reductions to a level significantly below TVOC diffusion criteria related to the Eco Mark certification.

ORPHIS FW

エコマーク商品 省エネ・3R設計 15155054 理想科学工業株式会社

Ink

エコマーク商品 3R設計、有害物質の削減 15142009/15142010 理想科学工業株式会社

In addition, the ORPHIS FW series has acquired certification for the new Eco Mark by complying with Eco Mark criteria related to 3R (reduce, reuse, recycle) design, energy consumption, and operating noise.

Certification for Globally Recognized Blue Angel

The ORPHIS FW series obtained certification for Germany's Blue Angel, which has a mutual recognition agreement with Japan's Eco Mark. The Blue Angel is the oldest environmental label in the world. It is well known throughout Europe and has had a major impact on other environmental labeling systems around the world. The environmental



Blue Angel Certification logo

Certified products: ComColor FW5230/5231 (ORPHIS FW series for the European market)

performance of the ORPHIS takes into consideration the standards and guidelines of international organizations such as WHO and countries such as Germany, and it complies with globally recognized standards and regulations regarding TVOC diffusion and resource recycling.

RISO will continue to bring environmentally friendly products to offices around the world, and contribute to reducing the environmental burden on a global scale.

Supplier's Comment

Creating a Safer, More Comfortable **Office Environment**

Our genuine ink matches the hardware characteristics of the ComColor and enables faster printing speed and better printing quality. Besides maximizing the performance of the ComColor, we make our ink to have less TVOC diffusion and contribute to a safer, more comfortable office environment.



Approach to Environmental Protection

Improving Convenience while Reducing the Environmental Burden



RISO's Environmental Policy

RISO has established the RISO Environmental Charter and the RISO Environmental Protection Principles as clear statements of the Company's stance on environmental initiatives. These declarations serve to guide our company-wide environmental protection program.

RISO Environmental Charter

RISO resolutely acknowledges its membership in the global community, while following a basic philosophy of contributing to society through the development of excellent products. RISO endeavors to contribute to global environmental protection in order to bestow a fair and sound environment to coming generations.

RISO Environmental Protection Principles

1. Development of Environment-Friendly Products When developing and designing products, we create and execute development policies that reduce the total environmental burden by considering the influence that respective product life stages have on the environment in the manufacturing, logistics, use, recycling, and disposal phases.

2. Resource and Energy Saving

We investigate the influence exerted on the environment by our business activities and try to save resources and energy to reduce environmental burdens.

3. Local Environmental Protection

We observe local environmental regulations and investigate possible risks of contamination to prevent such occurrences in the case of an emergency, such as leakage.

4. Global Arrangements

We also consider our influence on overseas local communities and environments when operating or exporting products, and we try to respond to the requests of local communities as faithfully as possible.

5. Continual Improvement

We maintain a dynamic organization and system to establish environmental objectives and targets and always work to improve such systems.

6. Environmental Education and Information Disclosure

We educate our employees and carry out publicity activities appropriately, in accordance with the RISO Environmental Charter and the principles detailed above, to help employees deepen their insight on environmental issues.

We also disclose information on environmental issues without hesitation and work on further reducing environmental burdens in cooperation with other community members.

> Established on August 28, 1998 Revised on April 1, 2007 Akira Hayama President and C.E.O.



Based on the Action Plan of the Industries of Electrical and Electronics on a Low Carbon Society initiative proposed by the industrial community with the aim of reconciling corporate growth and global warming policies, we are setting yearly goals towards achieving the Fiscal 2021 Company-Wide Environmental Quantitative Targets, and we are proceeding with activities that reduce our overall impact on the environment.

*The Company-Wide Environmental Objectives and Targets that we used up until fiscal 2017 were quantitative targets aimed at complying with the Act on the Rational Use of Energy and achieving a low-carbon society. For fiscal 2018 and beyond, the name has been changed to Company-Wide Environmental Quantitative Targets

Reducing Energy Consumption (Crude Oil-Equivalent)

Throughout our domestic Japanese operations, we will:

>> Reduce the energy consumption rate per unit of sales to 3.79 kl/100 million yen or less by fiscal 2021

(The average annual rate of improvement in per-unit energy consumption between fiscal 2015 and fiscal 2021 is set at 1%. The target will have been achieved if the figure for fiscal 2021 is at least 7.73% greater than the base year of fiscal 2013.)

Reduction of Total CO₂ Emissions

Throughout our domestic Japanese operations, we will:

>> Reduce the CO₂ emissions rate per unit of sales to 12.10 tons-CO₂/100 million yen or less by fiscal 2021

(This is the figure for energy consumption rate per unit of sales (3.79 kl/100 million yen) converted to the CO₂ emissions rate per unit of sales, plus CO₂ emissions from distribution activities and RISO-owned vehicles.)

For all domestic production sites, we will:

>>Reduce CO₂ emissions per unit cost of production to 11.50 tons-CO₂/100 million yen or less by fiscal 2021

(This is the figure for energy consumption rate per unit of sales (3.79 kl/100 million ven) converted to CO₂ emissions per unit cost of production.)

Fiscal 2017 Results



We continued efforts that stressed the importance of conserving electric power in fiscal 2017. We made proactive investment with energy-efficient updates to equipment such as air conditioners and lighting, resulting in electricity savings. In fiscal 2017, energy consumption per unit of sales was 3.87 kl/100 million yen, which fell short of our target because of increased energy usage due to the start of production of new products. However, we met our quantitative targets under our Fiscal 2021 Company-Wide Environmental Quantitative Targets plan. Compared to fiscal 2016, energy consumption per unit of sales increased by 3% and CO₂ emissions per unit of sales increased by 1%. Moving forward, we will take appropriate PDCA measures as part of efforts towards further reducing our impact on the environment.

RISO maintains an environmental management organization system, has set medium- to long-term goals, and continues to develop activities.



Energy Consumption in Japan and per Unit of Net Sales

Scope of calculation: Energy consumption at all RISO business bases (non-consolidated) in Japan (excluding contracted transport operations and company-owned vehicle fuel). Based on non-consolidated net sales



CO2 Emissions in Japan and per Unit of Net Sales

fuel consumption by company vehicles, contracted transport for products and services by the Logistics Dept.; based on non-consolidated net sales.

At Our Development and Production Facilities

Improving Durability and Ease of Maintenance

RISO strives to reduce environmental impact by lengthening the service life of products. The ComColor GD series incorporates parts such as highly wear-resistant diamond-coated rollers and ball bearings, extending the service life from 6 million pages to 10 million pages. It is also easier to replace parts and carry out other maintenance on this series. As a result, users can benefit from a long service life of high-speed, high-volume printing.



An example of the highly durable parts of the ComColor GD series

Using Recycled Materials

We contribute to the circulation of resources by wherever possible using recycled plastic in our printers. This improves the environmental performance of our products.



An example of a recycled plastic part used in the ComColor GD series

Through Sales and Service Activities

Expanding Efforts to Convert Used Products and Components into Reusable Parts

RISO does everything possible to reuse products and components. Some components are collected and their consumables are replaced at the RISO Parts Center. They are then used again in the market after undergoing quality testing.

In fiscal 2017, we actively engaged in the expansion of reusing parts from collected used products, exchanged service parts, and more. We also promoted the use of such parts.



Flow of collection and reuse of products and components

Through Procurement and Logistics

Milk Runs at Overseas Plants in Thailand, China

In Japan and at our overseas plants, we have switched from having each supplier deliver materials and parts to RISO plants to a system called Milk Run System in which a RISO truck goes around to multiple suppliers to pick up or deliver

Supplie

these supplies. This system not only improves loading efficiency but also reduces transport costs. In addition, it reduces the amount of CO₂ emissions from delivery trucks, and thus reduces environmental impact.

Milk run truck Parts, --> Empty boxes

Supplie

Milk run system

Expanding the Use of Returnable Racks

When shipping products, we use returnable racks that can be collected and used repeatedly, thus reducing the amount of material such as cardboard and Styrene foam that we use. We have expanded the use of these returnable

> racks to include shipments of the ORPHIS FW and GD series released in fiscal 2017 (in Japan).

At Our Work Sites

Participating in the Light Down Campaign

RISO participates in the Japan-wide "CO2 reduction/Light Down Campaign" every summer. We support this campaign, which is part of a larger initiative by the Ministry of the Environment to halt global warming.

In fiscal 2017 as well, RISO turned off all the lights at the Tsukuba and Ube sites for two hours from 8PM to 10PM on two separate days: the summer solstice on June 21 and Cool Earth Day on July 7.



Light Down Campaign poste



Returnable racks for the ORPHIS FW series

RISO works towards reducing a number of burdens on the environment through all of our business activities.

Collecting and Recycling Used Ink Bottles

We do everything possible to collect and recycle ink bottles, a printer consumable. The collected ink bottles are crushed and pelletized as recycled resin. These pellets are formed into a range of different plastic products and used to make a part of certain RISO products, or to make promotional goods or shipping pallets.



Flow of recycling for ink bottles

Cool Biz

As a way of counteracting global warming through energy conservation, and in accordance with the action policies set forth by industry associations related to electronics and electricity, every summer we set the air conditioning

temperature at 28°C and encourage employees to dress lightly at work in a campaign known as Cool Biz.

Furthermore, we ask our clients who visit us to cooperate in dressing lightly. RISO is increasing the awareness of each employee along with creating posters that notify and educate the public about Cool Biz.



Cool Biz poster





Elevating CE Technical Ability and Support through Technical Contests

Customer engineers (CEs) are responsible for the task of swift responses to repairs and maintenance inspections while providing a better printing environment. At RISO, we hold the RISO TECHNICAL CHAMPIONSHIP with the purpose of improving CEs' specialized knowledge, technical prowess, and customer relations.

The 14th Japan National Championship in January 2017 saw participation by 22 individuals chosen from over 1,500 participants in regional qualifying events all over the country. Competitors fought through each test's practical skills portion, which involved taking a written test, solving mechanical problems, and giving a speech.



Scene from a practical skills test

Remote Monitoring of Equipment Prevents and Quickly Solves Problems

Through the RISO Remote Agent service, the status of a customer's ComColor is monitored via the Internet, and the information is sent to a maintenance server to ensure high-quality maintenance. Under the Remote Maintenance Call Service, when the RISO Remote Agent sends an error report to the maintenance server, RISO Contact Center will phone the customer, thus ensuring quick response and solutions to problems.



RISO Remote Agent and Remote Maintenance Call Service

Worldwide Sales System for Service and Supply

supply of consumables and thorough maintenance systems.

and undergo maintenance performed by RISO-certified customer engineers (CEs), they are assured of minimizing breakdowns and thus

Japan, the U.S., the U.K., and Thailand so that they can continue to



Building Fulfilling Work Environments

Maintaining a Support System Enriches Work-Life Balance

With the idea that the fulfillment of each employee is connected to the activity of the whole organization, RISO maintains childcare leave, family care leave, and other systems so that employees don't have to choose between their jobs and their family even when things like maternity, childcare, and nursing care necessitate the alteration of work hours or work duties. We are striving to create an environment where women and men can work with peace of mind.

In 2011, RISO received recognition as being a corporation that offers childcare support. After obtaining the "Kurumin" mark, which is given to companies that support childrearing



for the next generation, we implemented robust public awareness and other action plans encouraging employees to take childcare leave and paid time off. That initiative was praised, and then its renewal was approved in 2013 and 2015 respectively.

In fiscal 2017, there were 41 people (including three men) who made use of the childcare leave system for a total of 3,333 days.

Advancing Women's Roles in the Workplace

We continue striving to give our female employees a more active role through the formulation and dissemination of an action plan based on Japan's Act to Advance Women's Success in their Working Life.

envision their careers at RISO. Twenty-four female participants engaged in This was followed by an encouragement training session for the bosses of the female participants, with the bosses learning about how to work with their subordinates and teach them management skills.

In order to fulfill our responsibilities to society, we do everything possible to communicate and closely coordinate with stakeholders in implementing a variety of activities.

Return-to-Work Support Seminar Helps Employees Balance Work and Childcare

At the annual Return-to-Work Seminar, employees returning to work after taking childcare leave are able to alleviate their concerns through advisory sessions with employees who have been through the same experience. The fiscal 2017 seminar welcomed six women and one man who planned to return to the workplace following childcare leave. Participants felt positive following the event, commenting that they understood what it would be like returning to work and that they were looking forward to coming back.



The Return-to-Work Support Seminar



RISO KAGAKU Sustainability Report 2017 14





Supporting Kashima Antlers as an Official Sponsor

RISO has been an official sponsor of Kashima Antlers, a professional soccer team in J League, since the 2016 season.

The Antlers are based in Kashima, Ibaraki Prefecture, where RISO's central manufacturing and development sites are also located.

The sponsorship and support of the Antlers include a shuttle bus service on their matches between Tsukuba Station and Kashima Stadium for their fans.



Poster promoting RISO's support of a shuttle bus service

理想科学工業は鹿島アントラーズを応援しています。

Environmental Learning for Junior High Schools

In November 2016, RISO took part in the 2016 Energy and Environment Education Workshop, held at Masugata Junior High School, a public school in Kawasaki, Kanagawa Prefecture.

Twenty-eight students from junior high grades one to three learned about environmentally friendly printing by making a newspaper using a mimeograph and a RISO digital duplicator.



Junior high school students try using a mimeograph

Locally Rooted Social Contribution Activities

ComColor Used to Print the Hakone Ekiden Newspaper Extra

In January 2017, RISO's high-speed color IJ printer ComColor was used to quickly print newspaper extras containing the results of the 93rd annual Hakone Ekiden (Tokyo-Hakone Round-Trip College Ekiden Race). Working with race sponsor the Yomiuri Shimbun, RISO employees

quickly printed out a large volume of the locally edited newspaper extras using ComColor printers on a demonstration car. These were distributed to the many spectators watching the race by the inbound and outbound finish lines.



Newspaper extras distributed at the finish line

Contributing Locally Through Relief Support Organizations

Following the Kumamoto earthquakes that occurred in April 2016, RISO offered free-of-charge replacement parts to customers whose RISO products were damaged. We also donated 1 million yen to the Japanese Red Cross Society in support of victims of this disaster.

RISO Educational Foundation* Donates RISOGRAPH Digital Duplicator to Community Promotion Council in the city of Rikuzentakata

citizens of the city of Rikuzentakata lost their lives. In June 2016, RISO

The machine is used to print out a variety of documents related to





ComColor FW Series Certified for Germany's Blue Angel **Environmental Label**

The ComColor FW series, released in March 2016, obtained certification for Germany's Blue Angel utilizing the mutual recognition agreement between Japan's Eco Mark and Germany's Blue Angel. The ComColor FW series is the first imaging device (copier/printer) to utilize the mutual recognition agreement.





Certified products: ComColor EW5230/523

Concept Product Shown at Leading Print Fair Germany

In June 2016 at drupa 2016 in Dusseldorf, Germany, one of the world's largest trade fairs for printing technologies, RISO had a reference exhibit of the newly developed RISO T1 full-color inkjet printer. Using roll paper and capable of printing out ledger sheets, RISO T1 opened up our new business possibilities.





More RISO products Registered with EPEAT Environmental **Assessment Tool**

As of April 2017, there are 10 models of RISO products that have been registered with silver rating in the field of imaging devices of Electronic Product Environmental Assessment Tool (EPEAT). EPEAT is also employed by the U.S. government to evaluate the purchase of electronics. Silver rating recognition is earned following evaluation of data on items including concern for the environment across the entire lifecycle of the product, from the use of materials and designs with a minimal

environmental impact, to collection and recycling, as well as environmental activities performed as a company.



EPEAT (silver rating) logo

RISO EPEAT registered models EZ221U, SF5450, SF5130, SF9450, FW1230, FW5230, FW5231, EW5000, GD9630, GD7330

ComColor Products Support COP22

RISO FRANCE cooperated with COP22 (the 22nd session of the Conference of the Parties), held in November 2016 in Marrakech, Morocco. The event organizers at COP21 held in Paris in 2015 were pleased with how RISO products were able to print out large volumes of conference documents and showed high environmental performance, so again in 2016 five ComColor machines were provided to print

France also carried and support of the machines.





Corporate Governance/Compliance/Risk Management

Corporate Governance

When conducting business, RISO's Board of Directors employs a governance system for important decision-making through the monitoring and direction of an auditor.

We also have external directors whose independent stance ensures there is no conflict of interest with regular shareholders. This guarantees a system that is sound and transparent.

RISO's Internal Control Department is the branch set up to maintain and evaluate the internal control system. This department monitors the finances and activity at plants, business sites, and subsidiary companies based on the Official Internal Auditing Regulations.

System Ensures Compliance

RISO considers compliance fundamental to corporate management. We consider societal ethics and morality to be very serious as we obey both laws and our own internal policies. Furthermore, we strive to conduct business with the understanding that we are, collectively, a member of society.

Our Risk/Compliance Committee leads compliance education and strives to continuously improve and strengthen risk management capabilities. In addition, the committee has the role of ensuring the effectiveness of measures related to matters such as compliance and harassment. This role includes operating a whistleblower system for dealing with incidents reported by employees and for offering consultation to employees. This system also protects the privacy of whistleblowers.

Corporate Governance Structure

General Meeting of Shareholders Board of Directors Interna Control Dept Executive Committee Audit function Internal Control Dept. Auditing Risk/Compliance Committee Advice *1 Whistle-Blower System: Employees can inquire or report directly to the risk/compliance officer via a compliance hotline and a harassment hotlin eloping and evaluating internal control systems related to rnal audits and financial reporting: Conducted by the Internal Control Dept

Risk Management Systems

RISO has formulated its Regulations to Manage the Risk of Loss, which are based on Japan's Companies Act. For major business and work conducted by the company, the Executive Committee and the Board of Directors analyze associated risks and consider measures to deal with such risk, then decide which of these measures to implement. The Risk/Compliance Committee analyzes and assesses the effect that a range of risks will have on the RISO Group and creates "risk maps" to outline ways to deal with such risks. By formulating and implementing individual programs to deal with risks that could have a major impact on Group management, we strive to reduce and avoid risks as part of integrated, systematic, and constantly improving efforts.

Overview of Risk Management



Information Security Risk Measures Protect RISO's Business

Information security risk is one of the biggest threats to business activities. The destruction, alteration, or external disclosure of confidential or personal information held by the RISO Group could cause substantial losses for the Group, its partners, and other involved parties. To better address and minimize information security risk, RISO has established an Information Management Committee.

Disaster Drill Simulates Oil Spill

RISO holds annual disaster drills that simulate a variety of emergencies and give participants practice in minimizing damage through prompt and proper reactionary measures. In November 2016 at Tsukuba Works, the disaster drills

simulated an oil spill, and participants practiced containing the spill using an oil absorption mat.



Practice using an oil absorption mat (Tsukuba Works)

RISO Named "FY2017 Contributing Company to the Privacy Mark System"

Since March 2014, RISO has been granted use of the Privacy Mark for its ongoing efforts to maintain and raise its level of personal being granted use of the Privacy Mark for the company that contributes to the Privacy Mark unauthorized access.

RISO aims to be recognized by society as a trusted, robustly managed corporation. We work to continuously improve and enhance our management system.

Ongoing Compliance Education

RISO holds ongoing compliance awareness and education activities to ensure that company officers and all employees can fully understand and implement compliance.

Every year, we offer e-learning that looks at various case studies related to compliance. The major issues with

each case are explained, and participants find ways to properly solve these issues. In a monthly newsletter called RISO Compliance News, case studies are explained through an easy-to-understand comic-book style so that readers can understand how compliance relates to their everyday work.



RISO Compliance New

Compliance with Laws and Regulations

The fiscal 2017 inspection, measurement, and compliance evaluation results confirmed RISO's full compliance with laws and regulations. We have not received any fines or disciplinary action from administrative government bodies, nor have we received complaints from local residents regarding the environment.

through efforts to spread and promote the Privacy Mark system. With so much focus these days on the risk of information leaks, we do everything possible to prevent the leakage of through measures such as prevention of



Bringing Unique Printing Solutions to the World

RISO KAGAKU operates a global production and sales network. We use high-speed inkjet technology and digital stencil print technology to provide customers in over 180 countries and regions throughout the world with satisfying products and services.



Worldwide Facilities (as of July 1, 2017)

108-8385, Japan



Result Highlights (Consolidated Basis)



Operating Income/Profit Attributable to Owners of Parent

(¥ Millions) Operating income Profit attributable to owners of parent 8.000 3,993 4.000 2.000

2015

2013

2014

2016

2017

Sales Ratio by Region (fiscal year ended March 31, 2017)



Environmental Initiatives

1992	Established Environmental Committee
	Commenced ink cartridge collection and thermal rec
1997	Commenced production of products utilizing recycle
1999	Commenced recycling of RISOGRAPH digital duplicate
2000	Tsukuba Plant obtained ISO14001 certification
2001	Ube site obtained ISO14001 certification Launched RISO SOY INK
2004	Published Environmental Report 2004
2005	RISO Digital Duplicator obtained the Eco Mark enviror
2006	Obtained company-wide single registration of ISO140
2007	RISO Digital Duplicator conformed to the Internationa
2008	ComColor series obtained the Eco Mark environmenta Published Sustainability Report 2008 in English
2012	Launched Returnable Pallets for shipping ComColor s
2014	The ORPHIS EX series was awarded the Energy Conser
2015	EPEAT registration with RISO Digital Duplicator
2016	Launched rice bran oil ink for digital duplicators ORPHIS series was certified for Germany's Blue Angel
2017	ORPHIS FW series earned a Product of the Year Award

Main Products



ComColor **Full-color Inkjet Printer**

These inkjet printers for business use are capable of high-speed full-color printing with high-volume at low running costs.

GOCCOPRO **Digital Screen Maker**

These digital screen makers use a fully dry process, with no water or chemicals. There operation is as simple as using a printer to create precise, high-resolution master screens.

cycling

- ed plastic from ink cartridges
- tors

- nmental label
- 001 certification at domestic business sites
- al Energy Star Program
- al label and conformed to the International Energy Star Program
- series in Japan
- ervation Grand Prize in Japan
- Environmental label
- at Eco Mark Award 2016







RISO Digital Duplicator

These duplicators combine proprietary RISO technologies based on the principles of stencil printing. The more prints that are made from a single master, the lower is the cost of each page.

Third-Party Evaluation

Since the issue of its first environmental report in 2004, RISO has published regular reports on its environmental protection activities. As part of a larger initiative to communicate in an easy-to-understand manner how the Company's relationships with the environment and society are reflected in its management, the title was changed to sustainability report in 2006. The report includes concise summaries of fiscal 2016 with the aim of giving readers an easy-to-understand look at our activities.

In conjunction with the introduction of the first digital duplicator ink to use Japanese-grown rice bran, we have decided to also use rice bran oil ink in the printing of this report in order to be more environmentally friendly.

The information we could not include in this report, as well as information that had been previously included, can be found on our website (http://www.riso.co.jp/english/). Our Data Book, which details RISO business activities, can also be found on our website (Japanese only).

Scope

This report covers all Japanese domestic worksites and sales facilities belonging to RISO KAGAKU CORPORATION and RISO OKINAWA CORPORATION. For overseas operations, this report covers data on environmental burdens at manufacturing sites belonging to the RISO Group as well as certain power, fuel (including Companyowned vehicle fuel), and water consumption-related data for non-manufacturing sites. The scope of data calculation may differ on a case-by-case basis. For details, see each listing.

Period Covered

This report covers fiscal 2017 (the fiscal year from April 1, 2016 to March 31, 2017).

Note: Certain initiatives that fall outside this period have also been included in this report.

Japanese Publication Date

July 2017 Note: RISO plans to issue its next report in July 2018.

Guidelines Used for Reference

Ministry of the Environment "Environmental Reporting Guidelines 2012"

Major Changes during the Fiscal Year

April 2016

Along with the release of the RISOGRAPH SF series, we began selling rice bran oil ink, the world's first digital duplicator ink made from rice bran oil.

- September 2016
 We launched the ORPHIS GD series, which has a printing speed of 160 ppm, thus breaking our own world record for print speed.
- January 2017 The ORPHIS FW series earned a Product of the Year Award at Eco Mark Award 2016.

Website Supplements Printed Version of Sustainability Report

More detailed information on RISO's environmental management and business operations is available online.



Other Disclosure and Communication Tools Image: Comported Profile

Corporate Governance Report (Japanese only)

Financial Results

• Securities Report/Internal Controls Report (Japanese only)



理想の詩 *** A PR magazine focusing on various aspects of communication

With the aim of enhancing the reliability and objectivity of its sustainability reports, RISO asked a third party to offer opinions regarding report content and endeavored to incorporate those opinions into the production of the reports. This fiscal year we used TUV Rheinland Japan Ltd., the same evaluator that conducted the third-party evaluation of last year's report. RISO continues to pursue accuracy and reader-friendliness in its sustainability reporting, while reinforcing the quality of information it discloses.

Third party verification report for the "RISO KAGAKU CORPORATION Sustainability Report 2017"

RISO KAGAKU CORPORATION Mr. Akira Hayama, President

1. Scope, purpose, target, procedure and conclusion of the verification

TUV Rheinland Japan Ltd. (hereinafter referred to as the verification body), as an independent third party, verified the "RISO KAGAKU CORPORATION Sustainability Report 2017" and the "Environmental Information on the web" prepared by RISO KAGAKU CORPORATION (hereinafter referred to as the organization) from the view point of:

Rational calculation methods, reliability of numerical values and adequacy of contents of the report in terms of the environmental report, environmental performance and environmental accounting

• Disclosure of all important information in environmental reporting The purpose of the verification is to report the results including verification opinions.

Ministry of Environment's "Environmental Reporting Guidelines, and Environmental Reporting Standard," and GRI's "Sustainability Reporting Guideline" were used as reference during the verification process. However, the statement does not imply certification or compliance with these guidelines.

As a result of the verification that was performed in a planned manner, the verification team concludes that the "RISO KAGAKU CORPORATION Sustainability Report 2017" and the "Environmental information on the web" provide accurate data in light of the environmental reporting guidelines that are generally considered adequate as principles of reporting, providing that the organization takes appropriate corrective actions that were required in the verification process.

2. Verification opinion

In the Eco Mark Awards 2016 sponsored by the Japan Environment Association, RISO received the Product of the Year Award for the ORPHIS FW series A3/ledger high-speed color printer. This product was selected from among all the Eco-Mark certified products of 2015-2016 for its outstanding environmental performance, advanced features, and environmentally friendly design.

The ink cartridges and main unit of the ORPHIS FW series can be collected and recycled, and the product easily meets figures for standard energy consumption under the International Energy Star Program. It also meets standards for VOC (volatile organic compounds) diffusion, something previously difficult for high-speed printers. This is an outstanding example of a product that sets itself apart from the competition with excellent product value in the form of high environmental performance and a pleasant office environment for users.

The ORPHIS FW series has been lauded for achieving world-class basic performance and environmental performance. It has obtained certification for Germany's influential Blue Angel utilizing the mutual recognition agreement between Japan's Eco Mark and Germany's Blue Angel. It is the first imaging device to utilize the mutual recognition agreement. vo go se **[S** At Cc of cc m



July 18 2017 TUV Rheinland Japan Ltd. Tobias Schweinfurter, President

[Environmental Management]

RISO has been improving with each passing year in the accuracy of its environmental data. Although there was some inaccurate data in this year's report, this has been corrected, so data shown in this report and on the website is reliable. While there are still room for improvements in this respect, it has identified the issues that need to be dealt with. We can therefore expect these issues to be dealt with in future.

The greatest mission of any manufacturer is to contribute to society by bringing to market products that take the environment fully into account. RISO has worked hard to make products that are energy efficient and resource efficient and that use minimal hazardous chemicals. In future, RISO can make further progress by using the PDCA cycle and committing itself to taking action.

To add one more point, we can say that the company has striven to reduce its environmental impact; for example, it has reduced its CO₂ emissions. RISO should focus its environmental management on committing itself to reducing unit CO₂ emissions when production volume increases and reducing overall CO₂ emissions when production volume decreases.

We can say that RISO's environmental management has resulted in good environmental performance. I look forward to seeing the company set even higher targets and achieve even better results in future.

[Social initiative]

At the 2015 and 2016 meetings of COP (21st and 22nd sessions of the Conference of the Parties), RISO provided products that not only offered high-speed printing of large volumes of documents for the conferences, but that also did so in an environmentally friendly manner suitable to the theme of the events. We hope that RISO makes its mark in worldwide markets not just by obtaining a high share but also by doing what it has done in Japan: being an integral member of society, contributing to communities through outstanding products, and taking the initiative in solving the problems in the countries where it does business. In this way, the company can contribute in a way that is unique to RISO.

[Environmental accounting]

The most typical ways of energy-efficient investment contribute to improving cost structure. To achieve a company structure that is resistant to fluctuations in energy supply and demand, a company should invest a certain amount each year in improving energy efficiency. RISO's decision-making regarding periodic upgrading of plant and equipment has taken into account energy efficiency. However, in the previous two years the company's investment was not enough to set a trend in energy consumption reduction, and efforts in fiscal 2016 were not enough to make up for this shortcoming. Ideally, RISO should make constant investments in energy efficiency in order to achieve consistent reductions in energy consumption.

End

Note: The full third-party report is available from the RISO website.