

Hoping RISO Dry Thermal Screen System (RISO-DTS) will bring technological innovation to the screen printing industry

and RISO-DTS, new Screen Printing Technology will solve the big problems such as labor shortage, cost, and environmental impact that the industry is facing.



Hidetoshi Miura (age of 60)

General Manager & Corporate Officer in charge of RISO Print Creating Division. (PC Div.) Born in Tokyo in September 1960. He joined RISO in 1987 after working as an engineer at a construction company. He had worked at the RISO Japanese Domestic Sales Div. for 11 years. He transferred to the RISO International Sales Div. and had worked at RISO, Inc. in Boston, USA for a few years. He has been working as the General Manager of Print Creating Div. since he came back to Japan from USA in 2009.

with

**Interviewed by the chief editor
Shigeru Manago**

The chief editor of OGBS magazine.
Gendai Shuppan Publisher



Interviewer (Int.): I understand RISO Kagaku Corporation (RISO) is manufactures of printing equipment such as RISOGRAPH, digital duplicators, and ComColor, cost-efficient fast-speed inkjet printers. I understand RISO started its business as a mimeograph print shop after the war.

Yes, your understanding is correct. The late Mr. Noboru Hayama, the founder of RISO, started a mimeograph print shop in 1946, just after World War II. At that time, Japan was devastated, and everything was short. The basic printing materials including ink were scarce. Noboru Hayama was unable to get stencil print ink needed for his jobs, so he studied ink-making. In 1954 he succeeded in developing the first Japanese emulsion ink for stencil printing. This was the RISO's first step as manufacturers. Mr. Noboru Hayama also developed a small mimeograph printing press machine. In 1977, RISO came with Print Gocco (a small, user-friendly stencil printing machine for home use). Print Gocco became the long years' hit product. In the 1980s, RISO introduced epoch-making fully automated digital duplicators, RISOGRAPH to the Japanese market and overseas markets

Int: I know many schools have been using RISOGRAHS, and many print shops have been using them as production printers, so our publisher company as OGBS magazine, has been in close contact with RISO for many

years.

In addition to our mainstay business of selling RISOGRAPH and its consumables, RISO set up the print service business division named "RISO Print Techno." RISO organized the franchising system and developed the print service business through RISO Techno's direct shops and Print Techno membership shops.

At that time, small print shops in cities were called as a workplace of the 3Ds (Demanding, Dangerous and Dirty). Printing operators must work for many hours in the wretched working conditions. These print shops applied the almost same flat charge per copy to the print volume of fewer than 10,000 copies without volume discounts. This charging system was unfair from the standpoint of customers.

Then, taking advantage of RISOGRAPH, RISO came up with the idea of setting up RISO Techno Print Shops that provide a one-stop quick print service to customers, and that offers a fair variable charging system to customers with a short run job request, for instance, the requirement of 50 to 100 copies. RISO Print Techno ran 700 print shops (including the direct shops and franchisees) nationwide at its peak.

*Wound up the Print Gocco business.
Concentrated on the screen printing business.*

I have been responsible for the Print Creating Division (the PC Division) as the head since 2009. When I was appointed to the head of the PC division in 2009, I covered three areas of sales department: RISO Print Techno (the print service business), Print Gocco, and Screen printing. I finally decided to retreat from the RISO Print Techno business and the Print Gocco business and focus on the Screen printing business (GOCCOPRO).

Int.: What made you decide to back out of the RISO Print Techno business and the Print Gocco business and concentrate on the Screen printing business?

In a nutshell, "Selection and Concentration". Print Gocco had been a huge successful sales product for many years. It has a cumulative population of 10 million in Japan, and there had been many Print Gocco lovers; however, its sales started to decline as the personal computer became a common in people's life and went into many households.

In Japan, people had mainly used Print Gocco to make original New Year's greeting cards at home. However, the spread of the personal computer changed the landscape. People started to use the computer and the personal inkjet printer to make greeting cards. Besides, RISO had difficulty procuring raw material of flashbulbs (that were required to burn a screen master) from suppliers because an electronic flashes for the ordinary camera became common and flashbulbs became obsolete.

One of the biggest reasons that we decided to wind up our print service business was the advent of big business chain of print shops, including Kinko's. Some of the chain shops provided a 24hour print service. We may say our concept of the one-stop quick print service offering a reasonable charge was accepted and became prevalent. The expertise RISO accumulated from the RISO Print Techno service business was of a great value. One of the big objectives of RISO entering the print service business was to learn the needs, and wants' of print shops and customers accurately in the market as the manufactures of printing machines. In that sense, we achieved one of the big objectives

Therefore I decided to concentrate on the screen printing business in which RISO can use its technological edge over other competitors.

Int.: At that time, I think the screen printing industry was generally regarded as the minor twilight industry. Why did you decide to focus on the screen printing business?

RISO has always sought to make paper printing more

efficient and easier. This is as with currently available RISOGRAPH and ComColor. Our emphasis has always been on printing on paper; however, I wondered if RISO could capitalize on its unique technologies for printing on other materials. I realized that a wear printing market represented by original school T-shirts was expanding worldwide; therefore, I thought RISO should go into a new wear printing area other than printing on paper

Looking back up the history of screen printing is interesting. Originally the mainstream of screen printing was not for paper but for other materials, so screen printing (duplicating) on paper was the subsidiary stream. I thought going back to the mainstream with RISO's Digital Screen Making Technology would bring a new business opportunity to RISO. In the 1980s, duplicating (mimeograph) technology was said to be obsolete and already finished. However, the late Mr. Noboru Hayama, the founder of RISO, said that duplicating (mimeograph) technology was still at dawn. There would be a lot of technological room to develop, and he proved he was entirely correct. I have the same idea about GOCCOPRO, and I am taking on the challenge to sell GOCCOPRO products.

The reason why the brand name GOCCOPRO is born and why the brand color bright RED.

Int.: Why did you name the digital screen maker product as "GOCCOPRO" and why did you decide to make the brand color bright red?

This year falls upon the 10th anniversary of GOCCOPRO 100, which is the first model of GOCCOPRO series. Before GOCCOPRO 100 was launched, RISO had a screen maker model called SP400D for test-marketing. After test-marketing, RISO developed a new line-up with new RISO-DTS technologies and decided to make a new brand name. The brand name of GOCCOPRO was my personal intention. I wanted to pick one word, "GOCCO" from "Print Gocco" and use it as part of the new digital screen makers' name. Some people said the Japanese word "GOCCO" sounds like a toy, and it sounds amateurish. They disagreed with my opinion. However, I had a strong attachment to Print Gocco, so I strongly insisted on adding another word 'Pro' meaning professional after "GOCCO" and naming the new model series as "GOCCOPRO" Finally, I succeeded in convincing the people in our company to accept my intention.

Int.: Did you want to keep the Print Gocco legacy in some way?

You are right. Print Gocco had a lot of enthusiastic fans, so dreaming about the possibility of reviving Print

Gocco in some way someday in the future, I thought we should inherit part of Print Gocco name and use it for RISO's screen printing products.

Int.: When I saw the bright red body of GOCCOPRO 100, I was incredibly surprised.

The bright red was also my personal intention and my idea. At the time, the color of office equipment and printing machines was mostly gray because stains and ink spots were inconspicuous in the gray background. Coating GOCCOPRO 100 with bright red paint increased the manufacturing cost, but GOCCOPRO 100 was not a piece of office equipment, and I did not want to make it a piece of factory equipment, either. I wanted to make it a cool piece of equipment to be placed in a workshop, in which workshop operators are able to make a screen printing in front of the customer. Even if GOCCOPRO 100 is installed in an office, the bright red color looks stylish. I wonder which color is the best, blue, yellow, or bright red. I chose bright red.

Int.: I don't think there was a screen printing shop or business style in Japan, in which the operators was making screen printing in front of customers

When I was working in the US, there were such a screen printing shop. There were a lot of DIY superstores in the US and a lot of people were decorating their house interior by themselves. They often repaint the walls in their house and make furniture by themselves. They seemed to have a good artistic sense. Probably I learned an artistic sense in the US and remained in my mind. I thought the day when Japanese people also regard a good artistic sense as important would come. Therefore I selected a bright red on GOCCOPRO 100 to make it stylish and demonstrate an artistic sense.

*GOCCOPRO series has been developed
as its original plan.
The unit sales reached over 2,000 units.*

Int.: What difficulties did you find on the development of GOCCOPRO series products?

There were a couple of difficulties I must go through. As a matter of fact, in the beginning, there were a lot of heated debates inside RISO company as to whether RISO would need the digital screen printing business for its future, whether the digital screen business would be RISO's domain, and also whether the digital screen printing business would generate profits. My first hurdle was to convince people with opposing opinions. Anyway, I managed to persuade them. My second hurdle was to secure resources needed for digital screen maker sales and

marketing, the model research & development, and field support (including after-sales service). I overcame these hurdles.

Int.: Moreover, soon after the launch of GOCCOPRO 100, RISO reinforced the GOCCOPRO line-up by adding more GOCCOPRO products one after another, and RISO also improved screen masters in a short period. This must be a big financial burden for RISO. I don't think most of the companies made the same decision. I think most of them must have waited and seen how the first GOCCOPRO 100 would go for a couple of years and decided the next action, don't they?

After RISO launched the first model, we introduced three new additional GOCCOPRO series models onto the markets. We didn't launch additional new GOCCOPRO models randomly. We introduced them according to the original marketing plan and the product development roadmap. We released the first model to show to the industry and customers how RISO's digital screen printing technology would potential and innovative. We launched the 2nd model called GOCCOPRO QS200 to cope with larger size (A2 size) screen printing and launched the 3rd model called GOCCOPRO QS2536 to meet the requirements of professional screen printers. Then we introduced a small portable MiScreen a4 for original fashion designers, illustrators, creators and hobbyists. If we had introduced new GOCCOPRO models one after another at random without the well-planned road map, we could not have succeeded in making the proper line-up.

Int.: I don't think you could do this unless you had good foresight and very strong passion for GOCCOPRO.

Luckily, I have been responsible for GOCCOPRO as the head of the Print Creating division for the last ten years in a row. I could not have done this if I had not overseen the division for ten years. The president Akira Hayama who is CEO of RISO company has been the director in charge of this division. He has been giving extensive support to me.

Int.: May I ask the present population of GOCCOPRO series unit sales in the world?

The total population of GOCCOPRO series is over 2,000 units in the world. About one-third are in Japan, and two-thirds are in Europe and the US. GOCCOPRO series are doing well in Europe, especially in Italy. GOCCOPRO is the synonym of Digital Screen Makers in Italy. I am sure it will further penetrate all countries in Europe if marketing is properly done.

When we look at the US screen printing industry, most US screen printing shops/companies are using large automatic printing presses. This is the mainstream of the US screen printing industry. It was said that RISO digital screen

masters burnt by GOCCOPRO were too weak to stand the high squeezing pressure of an automatic press; however, RISO's 3rd generation improved screen masters proved they were durable enough to stand the high squeezing pressure of an automatic press. Following US heavy professional screen printing shops/companies using automatic press I am sure heavy professional screen printing shops/companies using them in China and Asia will also use GOCCOPRO machines, too.

Professional screen printer customers have highly evaluated the durability of the 3rd generation screen masters and come back to GOCCOPRO.

Thanks to the introduction of the 3rd generation screen masters, GOCCOPRO users, who once found a problem with the durability of RISO screen masters, started to re-evaluate GOCCOPRO machines and screen masters and use them more.

Int.: What is the profile of GOCCOPRO machine users?

The user profile differs from one machine to another; therefore, it is difficult to generalize the user profile. Schools and screen printing workshops are using GOCCOPRO series together with the 3rd generation screen masters. We identified the profile of GOCCOPRO 100 users and the most of the customers were new entrants into the screen printing business. They used GOCCOPRO 100 to print T-shirts, labels, names, and logotypes, etc. The higher-end models such as GOCCOPRO QS200 and GOCCOPRO QS2536 made it possible to burn bigger size screens and offer precise registration for multi-color printing. Professional screen printers were interested in higher-end models and started to introduce them to their workshops/factories.

At that time professional screen printers were interested in the direct inkjet garment printers for a wear printing (DTG printers), so they mainly invested their money in buying them. However, the strengthened GOCCOPRO's line-up and the advent of RISO's improved 3rd generation screen masters changed this trend. Many professional screen printers re-evaluated the benefits of GOCCOPRO series. This was made possible by matching of both the beefed up the model line-up and improved screen masters.

Int.: Please let me know at what point big professional screen printers re-evaluated GOCCOPRO series?

The first point was the easy operation, the second point was the simplified screen-making process, and the third point was overall cost saving. I don't mean RISO's

digital screen makers are good for reducing the number of screen printing operators. The point that professional screen printers evaluated was GOCCOPRO could reduce operators' screen making hours, and they could use saved hours to acquire the computer skills and digital image processing skills. GOCCOPRO enabled the operators to have more time to add extra value to their skills and to do a more productive job.

In recent years we can buy good quality products at reasonable prices. Operators' salaries will not increase even if they improve their screen-making skills and squeezing skills. The operators retire when they get old, but young people don't want to work as the operator. To cope with the labor shortage problem, screen printing companies must think of the automated screen printing system or the introduction of the digital equipment such as GOCCOPRO products.

Int.: When the GOCCOPRO 100 came out, most of Japan's industries didn't fully recognize the importance of human resources. They didn't recognize the problem of increasing labor costs, either. Professional screen printers thought GOCCOPRO machines were not designed for them just looking at the result of screen printing by GOCCOPRO and the durability of RISO screen masters. However, professional screen printers have recently recognized a shortage of their operators and re-evaluated the benefits of GOCCOPRO, and they have come back to GOCCOPRO.

I also think there is a phenomenon that professional screen printers have come back to GOCCOPRO. This phenomenon is due to a labor shortage (a shortage of operators) and increasing labor cost, coupled with the strengthened GOCCOPRO Line-up and the improved 3rd generation screen masters.

As I have mentioned earlier, in addition to the line expansion of GOCCOPRO machines, the durability of screen masters has been largely improved. The improved durability of screen masters expanded the width of usable inks. Customers who were unable to apply solvent ink to the 1st generation screen masters said they could use the solvent ink with the 3rd generation of the screen masters. They are re-evaluating GOCCOPRO and RISO improved screen masters.

Furthermore I think customers have evaluated the high targets we set for the screen master durability and solvent resistance. We have succeeded in further strengthening the screen master durability and solvent resistance applying RISO Master Hardener RED.

Int.: Please let me know to what extent the 3rd generation screen masters have been improved?

The 3rd generation screen masters are more than twice as durable as the 1st generation screen masters. RISO as the

manufactures said it hold the good condition about 1,000 prints without applying a hardener. The durability depends on squeezing pressure, but some customers report they can print more than 1,000 prints. If you use RISO Master Hardener RED, you can press about 2,000 prints.

In the past, I rather felt that screen printing by RISO Screen Makers was far better in efficiency and productivity than the conventional emulsion screen making method, so RISO could justify the durability of the screen masters even if they were not as durable as emulsion screen masters. Now I believe RISO will have to make the durability of the screen masters as strong as that of emulsion screen masters. Our R&D is taking up this challenge. We are using RISO-DTS technology for GOCCOPRO series. We are driving the GOCCOPRO sales of RISO-DTS built-in in the world.

Proposal of the GOCCOPRO customization to the need of professional screen printing customers.

Int.: Probably requirements of professional screen printers are different from one printer to another. Do you have any plan to offer customized machines to professional screen printing customers?

Yes, I do. Listening to each professional screen printer's specific requirements and customizing the present machines to its need is more important than introducing a new GOCCOPRO product, so I am thinking of fully using RISO-DTS technologies available and customizing machines to satisfy each customer's specific need. I have a lot of big dreams. RISO can probably make a GOCCOPRO machine that can burn an image on A0 size screen masters; RISO can probably make a machine that builds in both a digital screen maker and an automatic printer; RISO can probably come up with an innovative the digital portable model smaller than MiScreen a4 model.

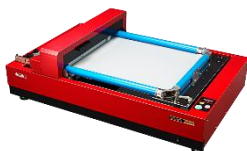
Int.: What is the ideal that RISO would like to seek by

GOCCOPRO?

First, I believe in the potentiality of screen printing and believe it will last forever, but it needs innovation. I hope RISO's screen printing technology will bring technological innovation to the screen printing industry and solve the problems (a shortage of operators, environment protection and social sustainability) that the industry is facing. RISO is proposing the new screen printing standard. RISO-DTS technology has made the screen-making process simple and time-saving. Besides, RISO-DTS requires no emulsions, no chemicals and no water. It needs no darkroom, either. The footage GOCCOPRO require is small. In the past, it took young new operators many years to acquire screen making skills. They learned the skills by watching how skilled operators were doing the job, but at present, if GOCCOPRO are available, even young operators newly employed can do the same quality screen making job as experienced operators

Int.: Can I understand from what you said, you are hoping RISO-DTS technology will innovate the screen printing industry and help the industry regain vigor. And you are also hoping the industry will be reborn as the new screen printing industry that will attract young workers, and all workers in the industry can work safely and comfortably in environment-friendly circumstances without the use of chemicals.

Your understanding is correct. If you look at the history of paper printing, you will see offset printing has not changed to computer-aided on-demand printing overnight. At the early stage, transition always goes on slowly. The same is true of screen printing. The change from the conventional emulsion screen to RISO GOCCOPRO screen masters will not happen overnight; however, the change is steadily happening. I am hoping RISO-DTS technology will innovate the industry and will make the workplace of screen printing clean, safe, and comfortable; screen printing workers will be able to work in good conditions, and they will give much better services to customers.



GOCCOPRO QS2536
Flagship model. Up to A2 over



GOCCOPRO QS1836
Flagship model. Up to A3 over



GOCCOPRO QS200
Versatile model. A2 size



GOCCOPRO 100
Entry model. A3 & Long size



MiScreen a4
Portable model. A4 size



RISO KAGAKU CORPORATION
Print Creating Division

www.riso.co.jp/english/product/digitalscreenmaker/
Japanese manufacturer of digital duplicator, high speed inkjet printer and digital screen maker. Established in 1946