# JGAS2005

*Report- Review -*

***October 4th (Tue)－8th (Sat)***

*Tokyo Big Sight（Tokyo International Exhibition Center）*
*Japan Graphic Arts Suppliers Committee (JGASC)*

See you again at

**IGAS** *2007*
*International Graphic Arts Show*

*Date: September 21(Fri)-27(Thu), 2007*
*Venue: Tokyo Big Sight*


## Table of Contents




# Greetings

**Yoshiharu Komori**
President
Japan Graphic Arts
Suppliers Committee

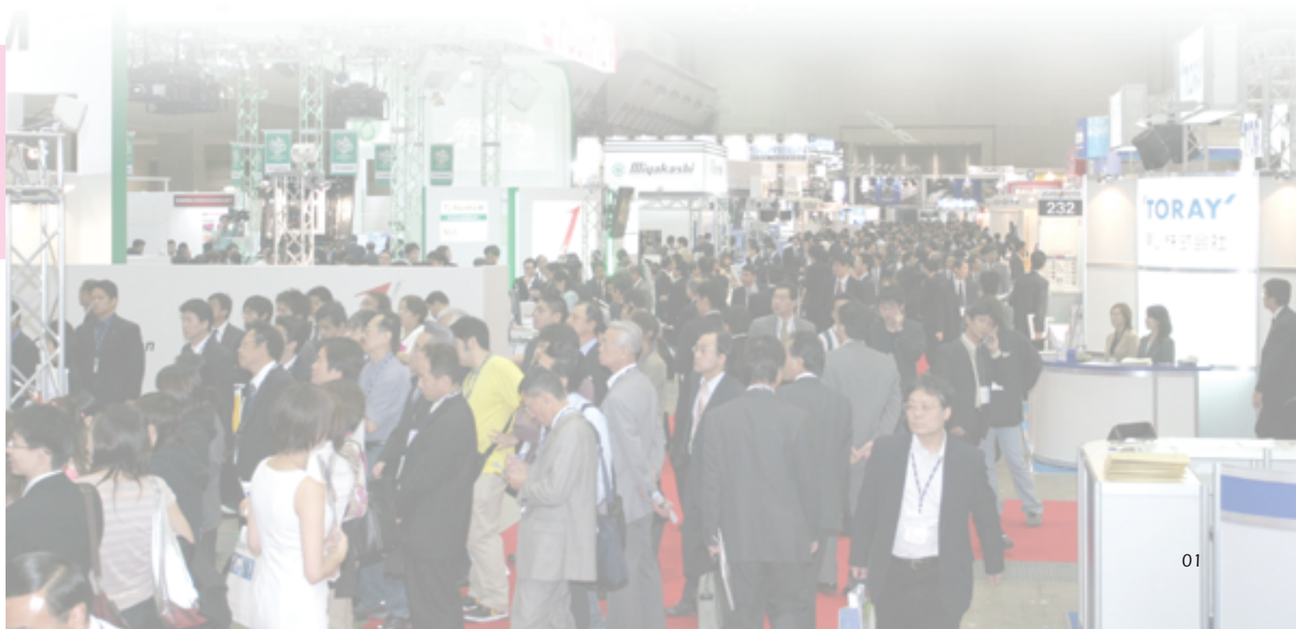
JGAS 2005, hosted by the Japan Graphic Arts Suppliers Committee, was held under the theme of "Added Value Through Innovation" from October 4, 2005 (Tue) to October 8, 2005 (Sat), using the entire East Hall of Tokyo Big Sight with 350 exhibitors.

As JGAS 2005 was held amid signs of recovery in the printing related industries, I am pleased to announce that JGAS 2005 was very well attended. The total number of visitors was 118,418, far exceeding our initial target. Visitors from overseas, mainly from East Asia, reached 3,200. I would like to express my heart-felt gratitude to you all for your kind assistance and cooperation.

The next exhibition by the Japan Graphic Arts Suppliers Committee will be the IGAS 2007, which will be held for seven days from September 21, 2007 (Fri) to September 27, 2007 (Wed) using all halls of Tokyo Big Sight.

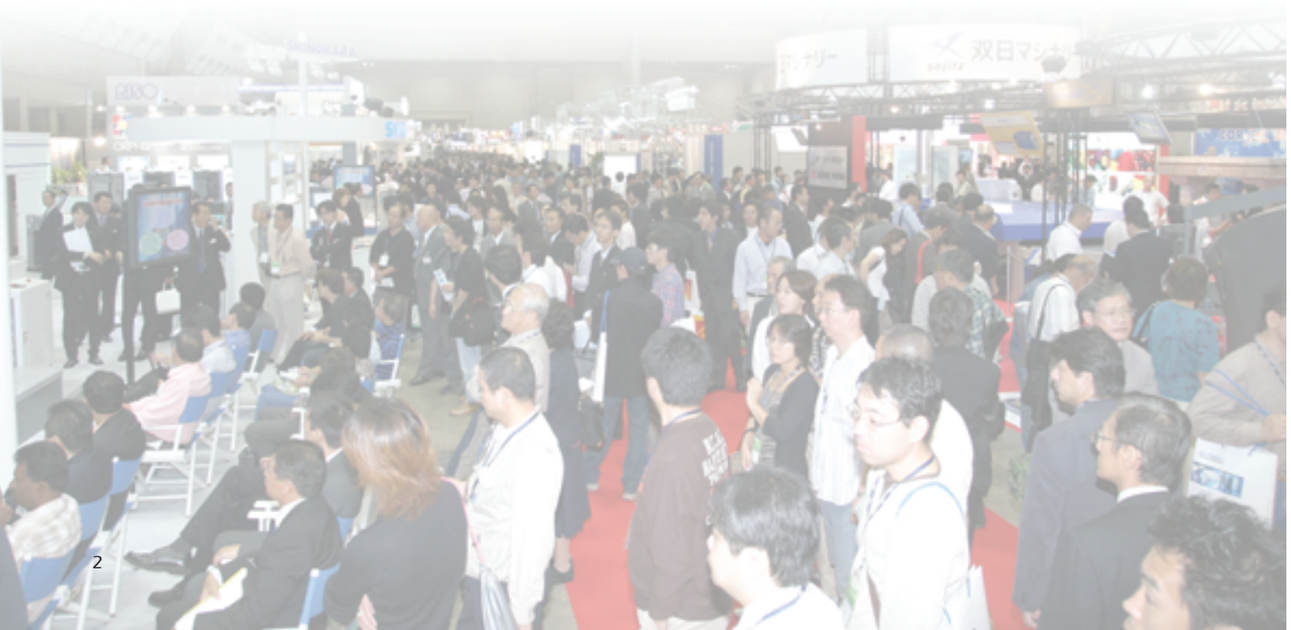
IGAS 2007 will be the second international exhibition after IGAS 2003. We will do our best to improve and innovate so that we can produce excellent results. Also we will intensify our promotional activities in both Japan and overseas so that IGAS 2007 will attract many more visitors as one of the world' s four biggest international exhibitions in its field.

I hope you will continue to give us your assistance and support.
Thank you.



# Exhibition Outline

| | |
|---|---|
| Title of event | JGAS 2005<br>Japan Graphic Arts Show 2005 |
| Purpose | For the contribution of the development and invigoration of the Graphic Arts Industries, providing people with opportunities to survey future technologies and to identify trends in printing and paper-converting technology. The show also facilitates international contacts for personnel in the graphic arts industries. |
| Theme | Added Value Through Innovation |
| Date | October 4 (Tue) to October 8 (Sat), 2005 (5 days) |
| Opening Hours | 10:00〜17:00 (10:00〜16:00 on the last day October 8) |
| Venue | Tokyo Big Sight (Tokyo International Exhibition Center j |
| Number of Visitors | 118,418 (including 3,204 from 41 overseas countries j |
| Number of Exhibitors | Total: 350 companies/bodies(including 15 overseas exhibitors) |
| Net Exhibition Area | 24,263 m2 |
| Total Exhibition Area | 51,380 m2 |
| Site Area | 243,420 m2 |
| Admission Fee | Yen1,000 for 5-day ticket (Pre-order) Yen500 for 5-day ticket |
| Organizer | Japan Graphic Arts Suppliers Committee (JGASC)<br>c/o Japan Printing Machinery AssociationKikai Shinko Kaikan 401-23-5-8 Shibakoen, Minato-ku, Tokyo, 105-0011, Japan |
| Supporting Organizations | METI (Ministry of Economy, Trade and Industry)<br>Tokyo Metropolitan Government<br>JETRO (Japan External Trade Organization)<br>The Japan Federation of Printing Industries (JFPI)<br>Japan Corrugated Case Association (JCCA)<br>Japan Paper-box & Corrugated-box Industry Association |
| Countries/Areas Represented | 21 countries/areas<br>Austria, Belgium, Canada, China, Czech Republic, Denmark, France, Germany, India, Israel, Italy, Korea, Netherlands, Singapore, Spain, Sweden, Switzerland, Taiwan, UK, USA, Japan |





# Organization / Japan Graphic Arts Suppliers Committee

【Board of Directors】

| | | | |
|---|---|---|---|
| President | Yoshiharu Komori | Japan Printing Machinery Association | President |
| Vice-president | Kohei Yamamoto | Importers' Association for Graphic Arts Machinery and Material | President |
| Vice-president | Osamu Takahashi | Japan Printing Ink Makers Association | President |
| Vice-president | Shigetaka Komori | Pre-Press Systems Suppliers Association | President |
| Vice-president | Hiroshi Shirai | Japan Printing MachineryAssociation | Executive Director |

【Secretarial Committee】

| | | | |
|---|---|---|---|
| Secretary-General | Tokio Takeuchi | Japan Printing Machinery Association | Director/Secretary General |
| Secretary | Hitoshi Sekimoto | Importers' Association for Graphic Arts Machinery and Material | Secretary General |
| Secretary | Masashi Komatsubara | Japan Printing Ink Makers Association | Executive Director |
| Secretary | Tomio Kawada | Pre-Press Systems Suppliers Association | Secretary General |
| | Chotaro Sato | Printing & Publishing Institute | Executive Director |

# JGAS 2005 well attended

**Yoshiharu Komori**
President
Japan Graphic Arts
Suppliers Committee

This year's JGAS, under the theme of "Added Value Through Innovation", provided not only a place for the exhibition of state-of-the-art equipment and materials but also a platform for graphic arts personnel to look for new approaches towards innovative added value for the graphic arts. Featured speeches were keynote addresses about the possible future of the printing industry and a special program dealing with current issues including the special exhibition zone and related seminars.

Many international exhibitors took the chance to present their products for the first time at this year's JGAS. Regular exhibitors showed their renewed commitment to the markets of Asia. Thanks to the corporation from printing industry associations, JGAS attracted many venders and visitors, succeeding in gaining a firm foothold in the graphic arts industry and broadcasting valuable information from Tokyo.



# Event / Seminars

## ◆Special lecture

"Challenges and Prospect of Printing Industry in India and China"

## ◆Management Seminar

"Top executives in the industry discuss the latest issues"

## ◆Special Emergency Seminar

"Your company's readiness for disaster - is it really beyond a shadow of a doubt ?"

## ◆Standardization Seminar

"Latest Developments in the Standardization Governing Digitalisation of Printing"

## ◆Special Project

• "Life without Printing will Never be the Same !" Familiar printed matters

"Printed Matters are, In Fact, Part of the fabric of our lives!"
With the kind support from the Japan Federation of Printing Industries, a number of samples are exhibited. Visitors can actually feel the extent of the printed media.

## ◆Exhibition of the latest technologies

• Achievements of research and development of new technologies were exhibited by

1. Chiba University (Visual Information Processing)
2. Chiba University (Imaging Materials)
3. Tokyo Polytechnic University (Color Image Laboratory)
4. Tokyo Polytechnic University (Display Device Laboratory)
5. Research and Development Department, National Printing Bureau
6. Tokai University
7. Japan Printers Association

## ◆Educational Institution Hall

• For institutions providing education on printing technologies and technical skills

1) Japan Printing Academy
2) Metropolitan Iidabashi Technical Institute/Tokyo Disabled Development Institute

## ◆Hall for Printing Related Industry Association in Tokyo

Four printing industry associations in Tokyo, i.e. Tokyo Printing Industry Association, Tokyo Graphic Communications Industry Association, Tokyo Graphic Services Industry Association and Tokyo Bookbinding Industry Association, introduced their union activities and activities carried out by their members.

## 1. Visitors

Total number of visitors counted were 118,418, including 3,204 overseas visitors. At this JGAS, multi-entries were counted as one.

| Date | Visitors |
|---|---|
| Oct 4 (Tue) | 13,865 |
| Oct 5 (Wed) | 19,533 |
| Oct 6 (Thu) | 23,696 |
| Oct 7 (Fri) | 27,440 |
| Oct 8 (Sat) | 33,884 |
| **Total** | **118,418** |

### Overseas visitors

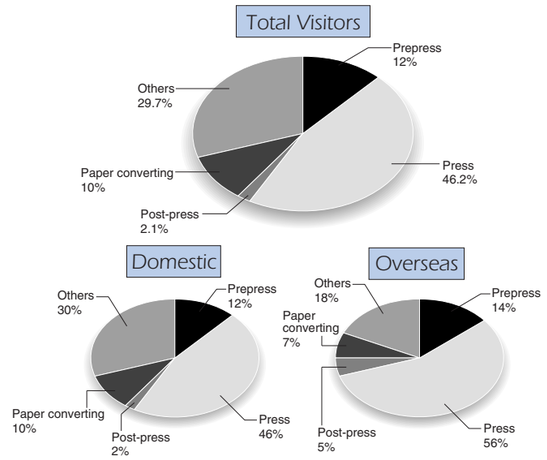
The number of overseas visitors showed 3,204 persons. Most of attendees (88%) were from East Asia such as China, Taiwan, Hong Kong and Korea.

| Area | No of Countries | Visitors |
|---|---|---|
| Europe | 15 | 146 |
| Africa | 2 | 5 |
| Middle East | 8 | 96 |
| Asia | 12 | 2,823 |
| America | 2 | 68 |
| Oceania | 2 | 41 |
| unknown | - | 25 |
| **Total** | **41** | **3,204** |

## 2. Analysis of visitors

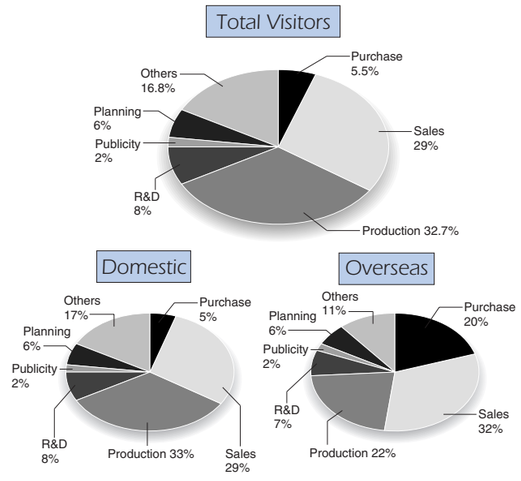
### 1) Category - Type of business

46% of visitors were related to "Press - Printing machinery", whose ratio slightly decreased compared with JGAS 2001 (50.0%). Visitors related to "Prepress", on the contrary, increased from 8 % (JGAS 2001) to 12%. Those related to "Postpress" decreased by half from 5% to 2.1%. From overseas, 70 % of visitors were occupied with "Press" (56%) and "Prepress" (14%).



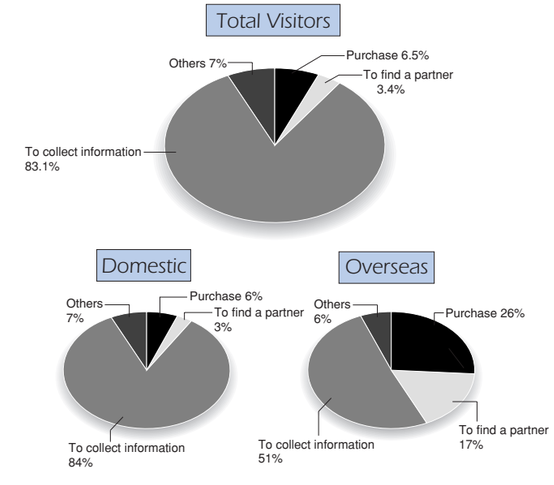

### 2) Occupation

The number of visitors related to sales and purchases noticeably increased from 1.5% (2001) to 5.5%. Visitors related to production also increased, from 25% (2001) to 32.7%. It is obvious that more and more visitors expected business opportunities at this kind of exhibition.



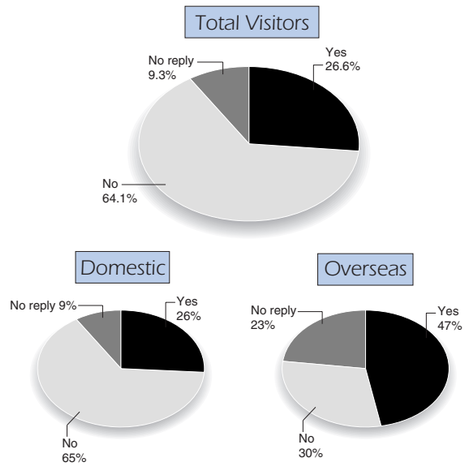

### 3) Purpose

The purpose of overseas visitors was quite clear. 26% of overseas visitors wanted to purchase products and 17% looked for partners. As for domestic visitors there were only 6% and 3% respectively. Most of domestic visitors (84%) were "To collect information", compared to half of overseas (51%).



## 4) Senior personnel (Are you in a position to decide purchasing?)

A quarter of domestic visitors (26%) and half of overseas (47%) were senior personnel (owners /directors). It appears that the exhibition provided more business opportunities than expected.




## ■3. Exhibitors

327 were domestic companies/bodies, which occupied 24,000 m2. 15 overseas exhibitors joined directly and occupied 230 m2. The number of co-exhibitors was 35.

| | No of Exhibitors | Exhibition Area |
|---|---|---|
| Domestic Exhibitors | 327 | 24,000 $m^2$ |
| Overseas exhibitors | 15 | 230 $m^2$ |
| Overseas associations & co-exhibitors | 8 | 35 $m^2$ |
| Total | 350 | 24,263 $m^2$ |
| Co-exhibitors | 35 | — |

One exhibitor may represent two or more sectors. It appears that most of the major manufacturers were dealing with a wide range of products from prepress to postpress including software based on the 'workflow' concept.





## ■4. Technical Trends

### Trends in the Japanese Printing Industry as seen at JGAS2005

"JGAS2005", the biggest exhibition of printing machinery and materials of the year 2005, was held for five days from October 4 to 8, using the entire East halls of the Tokyo Big Sight. Tokyo with 350 exhibitors. The number of visitors exceeded expectations throughout the exhibition period and reached a total of 118,418. The exhibition was a great success.

During the Print05 in Chicago, which was held ahead of JGAS2005 from September 9 to 15, the actual machines of those shown as prototypes at drupa 2004 were exhibited. The same were also exhibited in large numbers at JGAS2005, which enriched the exhibition even more.

One more feature at JGAS2005 was, that in East Hall 6, a unique exhibit - "Printed Matters are, In Fact, Part of the Fabric of Our Lives!" with support from the Japan Federation of Printing Industries, a variety of interesting samples were exhibited. Also, the National Printing Bureau, a number of the educational institutions and user associations/groups related to printing exhibited their works on standardization and environment preservation. They caught a lot of people's attention.

### The followings were the eight trends seen at JGAS2005

1) Demonstration of JDF flow which promoted the CIP4 (Cooperation for the Integration of Processes in Prepress, Press and Post-press) was carried out including the coordination with MIS (Management Information System) and bookbinding. For PDF flow, PDF/X-Plus capability and RGB flow was shown.
2) In terms of screening technology, various AM/FM screens and hybrid screens were presented.
3) As for proofing, halftone DDCP evolved into multi-color, and inkjet proof (forming pseudo-halftone dots) exhibited most widely so far.
4) For CTP, chemical-free and processless were the trends and the full line-up of violet laser CTP was displayed.
5) In many booths, convertible, double deck, tandem system of sheet-fed offset multi-color perfectors were displayed in full and marked improvements were seen in respect to coating. Offset printing presses, with out-of-standard sheet format specialized for certain users' needs, also caught attention.
6) As for digital printing systems, both electrophotographic and inkjet systems made progress including in the area of post-press.
7) In the areas of bookbinding and post-press, equipment aiming to improve operational ease and digitalisation came into fore.
8) Looking at products by category, labels were very active, and by production methods, flexography made headway. New categories that caught attention were RFID (IC tag) and security related products.

### Workflow

Demonstrations of CIP4/JDF took place actively
Preparations for PDF/X-Plus J were seen and RGB flow was also extensively promoted

**[JDF, MIS]**

In terms of digital integration, there were a large number of demonstrations of the workflow in the CIP4 data format integrating from CIP3/PPF of prepress, press, post-press to processes and JDF (Job Definition Format).

Particularly noteworthy were demonstrations including post-press in addition to the traditional prepress and press.

At the earlier Print05, integration with MIS

(Management Information System: Basic Business Information System) advanced further. At JGAS, a multiple number of domestically produced MIS were displayed and demonstrations of JDF work flow to coordinate with the MIS were carried out inside various booths.

**[PDF/X, PDF/X-Plus]**

"PDF/X" is the ISO standard for PDF for printing. The Ghent Working Group from Belgium, as the coordinator of the EU bloc, announced the standard called PDF/X-Plus aiming to use "PDF/X" for each of the printing targets. Preparations for the Japanese version of PDF/X-Plus have started and were introduced in the booth of a non-Japanese printing press manufacturer at JGAS. A seminar was also provided by the PDF/X-Plus J Promotion Council (Preparatory Committee) during the exhibition period.

**[RGB Workflow]**

In recent years, in line with the popularity of digital cameras, the workflow that makes use of RGB data had been the focus of attention and had become popular. It must, at the end of the day, be converted to CMYK data. Therefore, the full line up of RGB optimization workflow including conversion software were displayed at JGAS. RGB flow will continue to develop further to respond to multi-colour including special colors and media other than printing media. With regard to PDF/X, RGB workflow will function within PDF/X3, the ISO standard.

## (Prepress Field)

**[DAM, XML, Auto-typesetting, Font]**

DAM and auto-typesetting made use of XML
Licensing of font for OS X

New products of DAM (Digital Asset Management) were launched which make possible a more efficient production of catalogues, etc.

AdobeCS2 shared various application software including Indesign, Illustrator and Photoshop with XML metadata format, XMP template, and the connection with DTP can be made seamlessly via XMP. In this environment, new DAM (Digital Asset Management) software that shared data with clients and maintained and updated the data for catalogue production, etc. were introduced.
Full line-up of auto-typesetting software that made use of XML for various degrees of difficulty of work was displayed.
In order to lighten the burden of investment in the digital assets of fonts during the period of transition to Mac OS X, a proposal to license OS X font was made.

**[Screening]**

In response to the revival of high fidelity printing, both Japanese and non-Japanese prepress manufacturers showed off their own high fidelity printing including AM high fine line printing, FM screens, AM/FM hybrid screens and cross modulation screens. Some of them allocated a corner of their booths to the high fidelity printing gallery.

**[Proof]**

Halftone DDCP expanded the color gamut and got closer to proof print on the actual stock.
Progress was seen in pseudo-halftone dots and monitor proof was launched.

While halftone DDCP further narrowed the gap with proof-print on the actual stock, it expanded colour gamut in preparation for 7-color printing and special colors and expanded scope of use including high fidelity printing and for packaging.
For DDCP, non-Japanese manufacturers put a lot of efforts into recipe colours as their answer to 7-color printing. Japanese manufacturers also improved their DDCP products' capabilities in special colours and expanded colour gamut.
In order to narrow the gap between DDCP and proofing with actual paper on proof presses, Japanese manufacturers lined up a greater number of new and improved option software.
On the other hand, in terms of continuous tone DDCP, inkjet proof systems to form pseudo-halftone dots became popular in line with CMS. At JGAS2005, a large number of new products were launched together with RIP by both Japanese and non-Japanese manufacturers.
In addition to remote proofing via Internet, a press-side monitor proofing system was presented in which CTP image data were displayed on the console monitor in the press-side. It becomes useful when not enough time could be spared for the hard copy output.
Japanese monitor manufacturers introduced LCD monitors suitable for various proofing with AdobeRGB capability.

**[Chemical-free, Processless CTP]**

CTP evolved to chemical-free, processless Line up of violet laser CTP shown

Demonstrations of chemical-free CTP that had been announced at drupa2004 took place at JGAS2005. There was quite an improvement in the area of processless CTP.
The manufacturers who traditionally had concentrated on thermal CTP entered into the violet laser CTP market including photopolymer plates, which expands the options significantly.
In terms of chemical-free and processless CTP, a number of systems were introduced including "phase change", i.e. "switchable polymer" that formed lipophilic images on hydrophilic polymer, "on press processing" in which the unexposed parts of the attached post-imaging plate in the press is dissolved by dampening water and removed by ink roll, "ablation method" which is chemical-free processing by laser ablation and the "gumming method" which is chemical-free processing by gumming after exposure.
For "on press processing" processless CTP, Japanese manufacturers demonstrated by using the multi-color offset printing press and DI printing press in their booths.
For chemical-free processing, non-Japanese manufacturers demonstrated CTP processing by gumming using the multi-color offset printing press and Japanese manufacturers demonstrated laser ablation CTP system using the DI printing press.

## (Offset Press)

3 types of multi-color perfectors and presses with coating feature
Move toward "de-standardization" for wider application, focusing on space saving

**[Press specifications]**

Sheet-fed offset presses have more unique features both in the areas of perfectors and one-side presses. They are not only standard A1 and A2 format, but also standard-plus sizes and larger formats, making use of water-base/UV coating functions.
This is because nowadays sheet-fed offset presses are expected to have a feature to print even lightweight paper, which used to be handled by the web offset press. In addition to responding to an increasing need for non-standard format printing such as label printing and packages printing, these models are comparatively large or small in size and require less space for installation.
At drupa2004, an overseas press maker introduced a reference prototype for printing large formats up to a maximum size of 75 x 105cm. The same maker exhibited a new model of the series at JGAS, and gave a demonstration. This new model, operated at a high speed of 1800rph, is capable of achieving high quality results by using FM screening technology, etc.
Japanese makers have a dominant share in the area of A2 and A3 size presses in the global market. An A2+ press manufacturer has developed a one-side multi-color press-and perfector that can easily print 8 pages of B5 size.

A Japanese manufacturer who had introduced a unique satellite-type A3 press prototype for A3 size at JGAS 2003 exhibited the finished model for practical use at JGAS 2005. Equipped with an impression cylinder with a quadruple diameter, this press processes both lightweight paper and cardboard. Compared with the conventional A3 models, it requires much less space for installation.

**[3- types of multi-colour perfector]**

In the area of multi-colour perfectors, makers exhibited various types of models such as convertible, double-deck and tandem types. Domestic manufacturers introduced new products that are used in conjunction with peripherals such as inline coaters and UV curing units. Roll-to-sheet type roll feeders were also exhibited.

For the A1 size application, ten units of convertible multi-colour perfectors were exhibited. B2 size multi-colour perfectors were also introduced at the show.

Double-deck type perfectors have become widely used in Japan as they are about the same size in length as one-sided multi-colour presses, compared with convertible type perfectors that tend to be much longer.

Domestic manufacturers that used to make convertible - and tandem-type multi-colour perfectors came up with double deck models this year, and demonstrations were given during the show.

A leading domestic maker in this sector implemented a full model change and gave a demonstration of the new model with countermeasures for fan-out and enhanced register precision.

While at the Print 05 Show, two overseas makers and one Japanese maker gave demonstrations of perfectors with roll feeders attached to it, demonstrations on how to use a double-deck type perfector equipped with made-in-Japan roll feeders were given at JGAS 2005.

**[High-fidelity printing]**

Demonstrations of high-fidelity printing were carried out by using A2 and A3 size presses, employing various screening technologies, 7-color printing, and waterless/UV printing.

**[Web offset press]**

As for web offset presses, there were only a small number of exhibits/demonstrations due to the limited duration of the show. Making use of videos and panels, several makers introduced new technologies such as automatic plate change and variable cut off web offset presses.

A Japanese maker introduced with demonstrations in a theatre a variable cut-off length web offset press applicable to both A and B sizes, utilizing sleeve blankets.

There was only one domestic manufacturer of rotary presses for the newspaper industry who displayed and gave a demonstration of a compact commercial web offset press for B2 and B3 sizes.

**[Peripherals and accessories]**

A number of in-line/off-line units for inspecting paper surface were introduced at the show.

A low-temperature drying support system and paper dust removers were also among the exhibits.

## (Label printing)

CTP system vs. rotary press
Focusing on laser die cutter and RF unit

This area saw an impressive line-up of products including software systems for prepress, CTP systems and offset printing, flexographic printing, intermittent rotary presses, and laser die cutters.

In the prepress field, small-scale CTP systems for letterpress printing and narrow-web flexographic printing were introduced in an effort to promote film-less proceses.

Domestic manufacturers of printing machines displayed a variety of models and gave demonstrations, emphasizing unique features of their own products as against the competitors'.

Included in the exhibits were offset rotary presses, flexographic rotary presses, intermittent Letterpress / offset rotary presses and presses.

Digital printing systems have evolved to meet the needs of media requirements such as anchor coating and labelling.

In the area of post-presses, an overseas maker exhibited with demonstrations of a laser die cutter that reads in position data and achieves high-speed cutting.

Other products on exhibit include inlet-applying machines in response to RFID tags and label tag converting machines.

## (Flexography)

Direct laser engraving systems in response to sleeve technology
Demonstration/introduction of narrow-web UV rotary press with handout sample works

There were not many equipments and printing presses exhibited at the show this year. Instead, participants resorted to videos to introduce their product samples, illustrating the progress of flexographic printing technology. Notable among handout samples were flexible packaging film bags.

In the prepress area, FM screening systems, water-base processing digital plates, thermal CTPs with laser an ablative masking system (LAMS), direct rubber/resin plate engraving systems in response to sleeve technology, round-imaging systems, and proofreading software for flexographic presses were introduced.

With regard to those laser engraving systems that were announced by three makers from Japan and overseas at drupa2004, while a Japanese maker introduced his product only on video, one of the overseas counterparts exhibited their direct laser engraving machine for rubber plate, and for polymer plate. An other announced their plans to start marketing their direct laser engraving systems on the domestic market.

UV printing presses are evolving in the narrow-web printing field. Demonstrations of rotary presses for printing labels and small folding boxes were carried out, and one ink maker handed out samples made by using a narrow-web UV flexographic rotary press developed by a foreign manufacturer.

## (Digital printing system)

Electrophotographic and ink jet technology picked up
Integration of prepress and post-press, enhancing collaboration with offset printing

The digital printing sector has gone through readjustments in terms of developing new markets and re-evaluating cost performance. Prepress and post-press are now incorporated into the digital printing system. Depending on product applications, it leads further growth respectively. While the electrophotographic printing system is making inroads into publishing and commercial printing, the ink jet system is widely used for business documents, label packaging, and also covers big signboards / displays for industrial purpose.

The former is working with post-press partners. The latter is used for continuous form, drop-on-demand flow and wider-format display with UV ink. Both are further expanding their business even with the IT media.

The electrophotographic system is also moving toward achieving enhanced interchangeability with the offset printing workflow to gain a larger product share in the commercial printing market.

With a view to entering into the commercial printing market, makers are enhancing the digital imaging system. In addition to running the system at a high speed, they have incorporated some of the features of processing machines and simple book-binders into the system such as 6 to 7 colour printing, perfect printing and coating.

# Exhibition Overview

In the DM and billing areas, both domestic and overseas exhibitors introduced high-speed full-colour ink jet printers capable of handling variable information at the show. Proposals were also presented to make a hybrid printing system that incorporates ink jet printer heads into the offset printing press to achieve printing based on variable information.
Numerous wide-format ink jet printers for printing outdoor signboards and industrial materials were also introduced. Among non-paper application products, focus was on UV ink jet printers.

## (Book binding & post-press)

JDF solution and digital printing related equipment on the rise
Integration and automatization of bookbinding operations

In the bookbinding and post-press areas, as JDF workflows and digital printing related machines and equipment evolve, a move towards systematization and automatization was quite notable. Paper cutters, folders, saddle stitching machines, and perfect binders with enhanced operability were introduced.
Japanese manufacturers of prepress, press and post-presses working for JDF collaboration demonstrated on how to linkup. Some overseas makers also gave demonstration, and many other post-press makers announced adoption of JDF.
Among the exhibits were paper-cutting systems that integrate functions of a lifter, a paper jogging machine and a waste paper stacker and back cutters handy for cutting two-up printed books.
Perfect binding machines normally use hot-melt glue, but some of them focused on handling PUR and cold glue. Medium- and high-speed binders and selective binding units for collators are also exhibited.
Saddle stitching machines were introduced, equipped with rotary feeder, folder feeder and 3-knife trimmer. Some binders appealed full-automated function that all necessary operations such as folding, collating, wire stitching/glue binding, and three-side cutting would be completed once printed sheets are placed on a tower-type multi-feeder. They are also suitable for wire stitching and glue binding.
Saddle stitching machines capable of selective binding were also introduced.
Simple binding machines used for digital printing systems were displayed, as well.

## (Ink and materials)

New ink products abound
Materials in response to diverse needs

JGAS 2005 saw an extensive line-up of ink products including high quality ink for sheet-fed offset presses and perfectors, and ink that does not requires skilled operators to handle. Ink and ink related products exhibited at the show also include environmentally friendly waterless ink, UV ink suitable for both lightweight paper and cardboard printing, and detachable external dryers. In the area of web-fed press, ink featuring a property of consistent resin dispersion was introduced.
In the area of flexographic printing, UV ink with low offensive smell and dryers were introduced.
As for ink related products, ink-dispenser and a fully automatized system for ink feeding and washing-up from ink fountain to ink roller train were brought to attention. An overseas maker demonstrated the integrated inking/dampening system realising high quality without using alcohol. A dual varnish (water-base or UV) circulating system was also introduced.
Other attractive products are a system that reduces powder spray up to half of what is normally required, compression materials that enhance durability of blankets, and a humidity conditioner for web rotary presses that eliminates static electricity and minimizes ink streaks/contamination.



# List of Exhibitors

### A
ABEKAWA MASTER CO., LTD.
ABIS Technologies,Inc.
Accel Graphics Japan,Inc.
ACROSS MACHINERY CO.,LTD
Advanced Technology System Co,.Ltd
Agfa-Gevaert N.V.
Akiyama International Co., Ltd.
ALL Japan Federation of Printing Industry Associations
ALPHA ENGINEERING INC.
ALTECH ADS CO,LTD
ALTECH CO., LTD.
AltechRouks Co.,Ltd.
ANRI Machinery Co. Ltd.
Applied Laser Engineering Ltd
ASAHI KASEI CHEMICALS CORPORATION
ASAHI MACHINERY, LTD.
ASYS CO., LTD.
At's japan
AZEARTH Corporation

### B
BALDWIN-JAPAN LTD.
BECKER AIRTECHNO CO., LTD.
Beijing 21st Century Packaging Co., Ltd.
BELPAC CO.,LTD.
BOGRAMA AG
Bosch Rexroth Corporation
BOSE PSYCHO PHYSICS RESEARCH Inc.
BST Japan Ltd.
Buhrs Japan K.K.

### C
Cardinal Co.,Ltd
CARL. MFG.CO.LTD.
CHUBU KAMITOKU CO., LTD
COBURN JAPAN CO.
COMNET CO., LTD
Comtecs Ltd.,Co.
Correns Corportion
COSMOTECH CO., LTD.
Creo Japan Inc.

### D
D.I.ASIA K.K.
DAC ENGINEERING CO.,LTD.
Dainippon Ink and Chemicals, Incorporated
DAINIPPON SCREEN MFG. CO., LTD.
Daitsu Machinery Co., Ltd.
DART CO.,LTD
Day International, Inc
Digital Streams Co.,Ltd.
Display Device Laboratory, Center for Hyper Media Research, Tokyo Polytechnic University
DUPLO CORPORATION
DuPont K. K.
DYNIC CO.,LTD.

### E
eAid, Inc. / Asahi System Kaihatsu KK (ASK)
EIZO NANAO CORPORATION
EPIC JAPAN LTD.
EPSON SALES JAPAN CORPORATION
Esko-Graphics Co., Ltd.
EYE CORPORATE PLANNING CO.,LTD
EYE GRAPHICS CO., LTD.

### F
Folex Ltd.
Founder International Inc.
FUJI CHEMICALS INDUSTRIAL CO.,LTD.
FujiFilm Graphic Systems Co,.Ltd.
FUJIFILM SIMPLE PRODUCTS CO.,LTD
FUJIKIZAI SERVICE
FUSO PRECISION Co.,Ltd.
FUTEC.INC

### G
GBC JAPAN K..K..
GMG Color Technologies Limited
Grapac Japan Co., Inc.
Graphic Communication Tokyo Industry Assoction
GTB Co.,Ltd
GUNZE LTD.

### H
H.IKEUCHI&CO.,LTD
HAGURUMA ENVELOPE CO.,LTD
HAMADA PRINTING PRESS CO., LTD.
Hashiba Grand Co., Ltd.
HEIDELBERG JAPAN K.K.
Heiwa Machinery Co., Ltd.
HELL GRAVURE JAPAN
HERZOG+HEYMANN GmbH+Co.KG
Hewlett-Packard Japan,ltd.
hhs Leimauftrags-Systeme Gmbh
HINIX co.,ltd
HIRAKAWA KOGYOSHA CO., LTD.
HIRO CORPORATION
HIROSE IRON WORKS CO., LTD
HITACHI METALS PRECISION,LTD
HITACHI SYSTEMS AND SERVICES, LTD
HORI IRON WORKS CO., LTD.
HORIZON INTERNATIONAL .INC.
HUNET

### I
I.Mer co., ltd.
IGA MACHINERY CO., LTD.
IGT Testing Systems B.V.
Ihara Electronic Industries Co., Ltd.
IIJIMA MFG.CO.,LTD.
Image DJ Corporation Chiba University
INTER COSMOS CORPORAITION
INTERTECK CO., LTD.
ISEL..CO.,LTD.JAPAN
ISO/TC130 - gAMPAC Consortium
ITOTEC CO.,LTD
ITOX SUPPLY CO.,LTD.
IWAHASHI CORPORATION
IWAKI SANGYO Co., Ltd.
Iwasaki Tekko co.,ltd.
IWATSU ELECTRIC CO.,LTD

### J
JAPAN COMPUTER & COMMUNICATION CO.,LTD.
JAPAN INTERNATIONAL COMMERCE CORP.
JAPAN OFFICE LAMINATER CO.,LTD
Japan Printing Academy
Jay Enterprises, Limited
JOINUP CORPORATION
JPE CO., LTD.
JPTEC CO.,LTD
JUST CORPORATION CO., Ltd

### K
K.K. IRISU
KANEFUSA CORPORATION
KATSUDA WORKS CO.,LTD
KATSURA ROLLER MFG.CO.,LTD
KAYOH TECHNO PLAZA CO., LTD.
KDK Co.,Ltd.
KEIYO MAGNIFIER CO.,LTD.
Kida Iron Works co.,ltd.
KIMOTO CO., LTD.
KING Corporation
KINSEISHA Co.,Ltd.
KINYOSHA CO.,LTD.
KINYOSHA CO.,LTD.
KIP Corporation
KIPES 2006 (Korea E&Ex Inc.)
KITADENSHI CORPORATION
KOBUNDO Co.,Ltd
KODAK JAPAN LTD.
Kodak Polychrome Graphics Japan Ltd.
KODAK VERSAMARK JAPAN, INC.
KOHAN K.K.
KOMORI CORPORATION
KONICAMINOLTA BUSINESS SOLUTIONS JAPAN CO.,LTD
KONICAMINOLTA GRAPHIC IMAGING JAPAN CO.,LTD.
KONICAMINOLTA IJ TECHNOLOGIES, INC.
KONOHANA CO., LTD.
Ko-Pack International
KOREAN PRINTING INFORMATION TECHNOLOGY ASSOCIATION
KOYAMA Corporation
KOYOSHA MFG. CO., LTD
Koyosha, Ltd.
KPRO CO.
K'S COMPANY LTD.
KUDO IRON WORKS CO., LTD.
KURZ JAPAN LTD.
KYODO PRECISION MACHINERY CO., LTD.
KYORITSU MACHINERY CO., LTD.

### L
L K COMPANY,LTD
LASERCK CORPORATION

### M
MARUBENI MACHINERY CO., LTD.
Maruka Machinery Co., Ltd.
MARUMATSU I ・P・U
MARUSHO CO.,LTD.
MASAGO AND COMPANY,INC.
MBO Binder Gmbh&Co.KG
MCK CO.,LTD
MEDIA TECHNOLOGY JAPAN CO.,LTD
MEGTEC Systems Inc.
Meiji Rubber & Chemical Co., Ltd.
MEIWA RUBBER CO., LTD.
Messe Dusseldorf Japan Ltd.
Mic Co.,Ltd.

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MISHIMA CO., LTD.
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MITSUBISHI CORPORATION TECHNOS
Mitsubishi Heavy Industries,Ltd
MITSUBISHI PAPER MILLS LIMITED
Miyakoshi Printing Machinery Co.,Ltd.
Morisawa & Company, Ltd.
MOTOYA Company Limited
MULLER-MARTINI JAPAN LTD.
MUSASHI CO.,LTD

## N

NAGAI MACHINE MFG.CO.,LTD.
NAGANO JAPAN RADIO CO., LTD.
NAGASE&CO.,LTD.
NAKATANI & CO., LTD.
National Printing Bureau
NIHON DENSHI SEIKI CO., LTD.
NIHON RANKEI KOGYO CO.,LTD
NIHON SIBERHEGNER K.K.
NIKKA LIMITED
NIKKEN CHEMICAL LABORATORY CO.,LTD.
NIKKO ENGINEERING LTD.
NIKKO KIKAKU HANBAI CO.,LTD
NIPPON LITHOGRAPH, INC. OSAKA
NIPPON LITHOGRAPH, INC. TOKYO
Nippon MacDermid Co., Ltd.
NISHIOKA MFG. CO., LTD
NITTA CO.,LTD
NSK Co.,ltd
NTT Communications
NUR JAPAN CO., LTD.

## O

OHNISHI KIKAI CO., LTD.
OKI DATA CORPORATION
OKUNO ELECTRIC INDUSTRY CO.,LTD
ONDA MFG. CO., LTD.
OneVision Software AG
ONLINE
Orange Corporation
ORION MACHINERY CO.,LTD.
OSAKA PRINTING INK MFG, CO.,LTD
OSAKO & CO.,LTD.
OTOKO MACHINERY WORKS,CO.LTD.
OZ CREATIVE

## P

palamides GmbH
Pantone Asia, Inc.
PBM CO., LTD.
PEIAC (China)
PONTE CHEMICAL CO., LTD.
PRINTEC INTERNATIONAL, INC.
PRINTING SYSTEM SALES CO., LTD.
PROSPER CREATIVE Co.,Ltd.
PUNCH GRAPHIX JAPAN CO.,LTD

## R

REPIC CORPORATION
RIETSCHLE JAPAN LTD.
RISO KAGAKU CORPORATION
RYOBI LTD

## S

S.D.G.K.K.
SAITOENGE
SAKATA INX CORP.
SAKURAI GRAPHIC SYSTEMS CORPORATION
SANBI PRINTING CO., LTD.
SANJO MACHINE WORKS, LTD
SANKI MACHINERY CO. LTD.
SANNKO
SANWA ENGINEERING LTD.
SANZEN Co.Ltd.
SATO MACHINE WORKS CO.,LTD
SATO TEKKOSYO
SEIKA CORPORATION
SEIKO ADVANCE LTD.
Seiko I Infotec Inc.
SEIKO PRINTING CO., LTD.
SEIKO SANGYO CO.,LTD
SEIKODO COMPANY Ltd.
SHA-KEN CO., LTD.
SHARP MANUFACTURING SYSTEMS CORPORATION
SHIBAHASHI CO.,LTD.
SHINANO PROCESS CO.,LTD.
SHINKO CO., LTD.
SHINODA&CO.,LTD.
Shinohara Machinery Co., Ltd.
SHOEI MACHINERY MFG.CO., LTD.
SHOWA CO.,LTD
Showa Information Systems Co., Ltd.
SHOWA PRINT,LTD
SINTOKOGIO,LTD.
SITMA JAPAN K.K.
SK LIQUID PRODUCTION CO.
SK SALES AND SERVICE CO.,LTD
Society for the Study of Printing
SOFTWARE Too CORPORATION
SOJITS MACHINERY CORPORATION
SOLUTECH INC.,
SPRAYING SYSTEMS CO.,JAPAN
Stork Prints Japan K.K.
SUMISHO LEASE CO., LTD.
SUN Engineering Co.,Ltd.
SUNRISE COMPANY CO.,LTD.
SUNWOKER CO.,LTD

## T

T&K TOKA CO.,LTD
TAIYO KIKAI LTD.
TAIYO MARK CO.,LYD.
TAKANO MACHINERY WORKS, CO.,LTD.
TAKE INC. Digital Imaging Dept
TANIGUCHI INK MFG., CO., LTD.
Tarng Yun Co., ltd
TECHKON Co., Ltd.
Techno Roll Co., Ltd.
TECHNOTRANS JAPAN K. K.
The Japanese Society of Printing Science and Technology
Think Laboratory Co.,Ltd.
TOHO SEIKI CO., LTD.
Tokai University
TOKYO BOOKBINGING INDUSTRY ASSOCIATION
TOKYO DEX CORP.
TOKYO ELECTRONIC INDUSTRY CO.,LTD
Tokyo Graphic Services Industry Association
Tokyo Human Resources Development Centers for the Disabled
Tokyo Kikai Seisakusyo, Ltd.
Tokyo Metropolitan Government Iidabashi Technical College
TOKYO OHKA KOGYO CO.,LTD.
Tokyo Polytechnic University, Center for Hyper Media Research
Tokyo Printing & Equipment Trading Co., Ltd.
TOKYO PRINTING INDUSTRY ASSOCIATION
Tokyo Printing Ink Mfg. Co., Ltd.
Tokyo Shuppan Machinery Co.,Ltd.
TOMEN TECHNO SOLUTIONS INC.
Too CORPORATION
Toray Industries,Inc.
TOSHIBA TEC CORPORATION
TOYO CORPORATION
TOYO INK MFG. CO., LTD.
TOYO KAGAKU SHOKAI CO., LTD.
TOYO OFFICEMATION, INC.
TRESU JAPAN CO.,LTD
TSUBAKI EMERSON CO.

## U

Uchida Machinery Co;Ltd
UCHIDA TECHNO CO.,LTD.
UENO CORPORATION
United Color Systemes Co., Ltd
UNO SEISAKUSHO CO.,LTD

## V

VANFU
Vision Scientific Co.,Ltd.
Visual Processing Japan, Inc.

## W

WAM!NET JAPAN K.K.
Wan An -ORTHOTEC Precise Machinery Co. Ltd.
WATANABE TSUSHO CORP.
Wenzhou Protec Vacuum Metallizing Co.,Ltd.
WPA (WATERLESS PRINTING ASSOCIATION)

## X

XANTE Corporation
X-Rite K.K.

## Y

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YAMATO MACHINERY
YAMATOYA & CO.,LTD.
YAMAZAKURA CO., LTD.
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Yoshikawa Chemical Co., Ltd.
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