



KONICA MINOLTA

YOU
ASKED FOR PRINT
INNOVATION

WE
MAKE INKJET THE
REALITY TODAY



Giving Shape to Ideas

AccurioJet KM-1



AccurioJet KM-1

MAKE INKJET THE REALITY TODAY

Incorporating the latest inkjet printhead design with patented Dot Freeze Technology™ and offset paper handling, the AccurioJet KM-1 is making sheet fed inkjet the reality today for many of our customers. Konica Minolta has innovated inkjet production creating a highly stable, colour accurate digital press platform. By combining material handling and stability from offset presses, with the benefit of digital technology this is allowing customers to take advantage of variable data printing and zero make-ready with unrivalled media handling printing onto standard offset media on an oversized B2 sheet.

Increase your scope to say yes to new customers and more profitable work. LED UV ink using Dot Freeze Technology™ broadens your application capabilities to print onto specialist media such as heavy textured, canvas, plastics* and packaging carton stock for folding cartons – the ‘swiss army knife’ of printing technologies will allow you to multitask switching applications easily and efficiently without compromising on quality.

*Plastics due to their nature may require pre-treatment such as Corona or primer.

4

EASY STEPS

ENABLING YOUR BUSINESS

STEP 01. **IDENTIFY**

UNDERSTAND THE
OPPORTUNITY

As the print and communications market continues to change, understanding how this will affect your production processes is paramount. You know your business and your clients; our dedicated team of inkjet and industry consultants will advise you on how to maximise your growth and return to serve both - new and existing customers.

Together, we will identify how digital LED UV inkjet printing can show a clear return.

STEP 04. **IMPLEMENT**

MAKE IT HAPPEN

We continue to work with you during and after the implementation to provide support to ensure for a successful partnership.

Professional services

After your decision to invest we will assign a project team leader who will work with you to map out a schedule of works showing you in detail at what stage which steps will be carried out and by whom that will include.

Training

Our dedicated customer training teams certify all AccurioJet KM-1 operators to ensure they have the highest level of knowledge and carry out the routine tasks to maximise uptime and quality.

STEP 02. ASSESS

DEFINE THE NEED

Through assessing and advising in numerous ways – from running innovation workshops, application analysis, business and marketing planning, we support you to turn your ideas into viable offerings. Our dedicated customer experience centre based in Langenhagen, Germany, is fully equipped to allow you qualify your application requirements prior to investing. We also have the facility to host your clients to run innovation workshops.

Konica Minolta has invested heavily to support media testing, as you look to expand your application portfolio we have the ability to test your new substrates before you go into production, providing advice and assistance if required on how to profile or apply pre-treatments to specialist media such as plastics.

1234

DIGITAL III
enabling your business

For more details please visit: <http://digital1234.konicaminolta.eu>.

Service

Our trained software service teams and service technicians are highly skilled and have a network of call centres to fall back on. Our core philosophy is to prevent issues from happening by carrying out regular preventative maintenance. We will work with you to plan and build a maintenance schedules, tailored to your production needs. Utilizing the latest technologies to identify and diagnose faults, our inkjet JETFORCE service team work with your operators to fix issues remotely. However, should there be a need for an engineer to visit; our teams will be fully equipped to ensure faults are rectified quickly and efficiently, ensuring downtime is kept to a minimum.

STEP 03. JUSTIFY

WORK OUT THE PLAN

Konica Minolta has invested in support teams that work with you to help maximise your return on investment. During each stage of the engagement and implementation we carefully map out what needs to be done so that you always know which team will be looking after you. Customers are provided with an individual inkjet plan, detailing the required steps and the potential return on investment. Our teams include highly skilled industry professionals that have expertise in areas such as automated

workflows, colour management, business strategy, marketing, application development and finishing.

Konica Minolta Marketing Services - a dedicated division working across the globe with some of the most prominent brands - help marketers and brands effectively plan and source all of their marketing collateral. Every AccurioJet KM-1 customer has the ability to join this supply chain to tender for work.

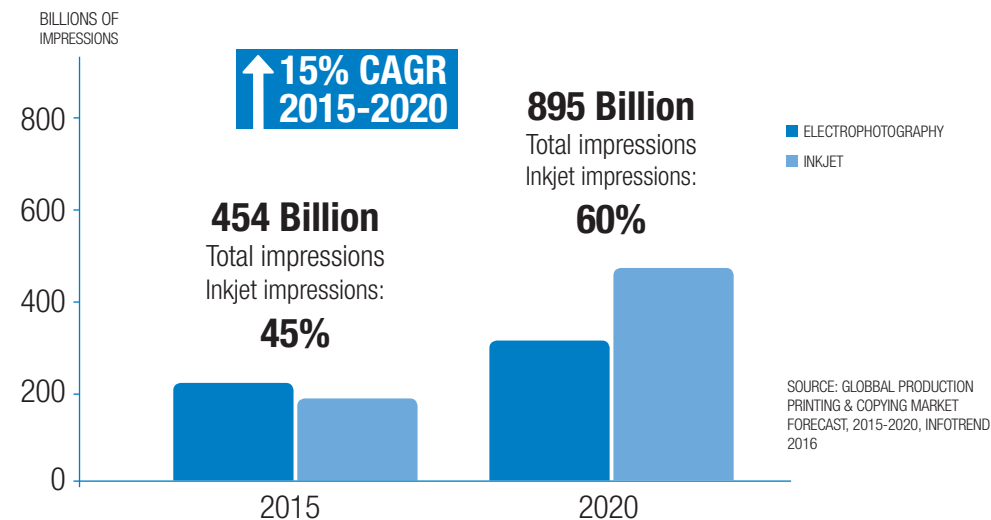
MARKET TRENDS

The production printing industry and communication market continues to change with digital print, and more importantly inkjet, taking an increasing share of the page volume.

PAGES WILL MOVE TO INKJET

Each year, InfoTrends forecasts growth in digital pages. Global digital production colour volumes totalled about 454 billion impressions in 2015 and are expected to approach 895 billion by 2020, with inkjet representing 60% of total digital colour volume at that time. Cut-sheet electrophotographic digital colour is also growing at a healthy rate.

DIGITAL PRINT VOLUME CONTINUES TO GROW



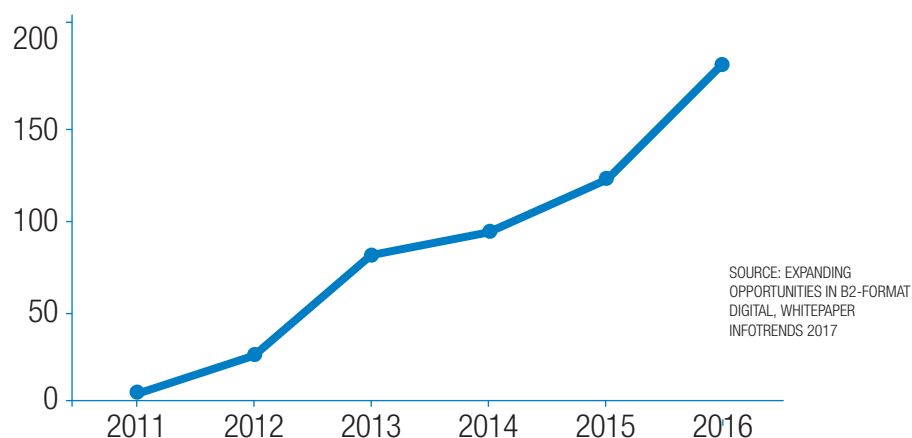
THE GROWTH THAT INKJET ENJOYS CAN BE ATTRIBUTED TO A COMBINATION OF FACTORS:

- **Scalability** enables digital print widths to match analogue processes
- **Unparalleled digital print speeds** without slowing down when printing additional colours
- **Configurable** to meet specific application needs
- **Non-contact printing process** delivers colour consistency and reliability

THE EMERGENCE OF B2-FORMAT DIGITAL PRINT

InfoTrends estimates that about 200 B2-format digital print devices were placed worldwide in 2016. A total of about 500 units have been placed since 2011. That installed base is expected to achieve double-digit growth rates through at least 2021.

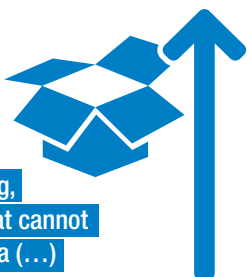
GLOBAL COLOR B2-FORMAT DIGITAL PRINT PLACEMENTS (2011-2016)



DIGITAL PACKAGING CAPTURING A NEW MARKET OPPORTUNITY

Packaging represents a substantial opportunity for print providers.

Almost all items are sold with some form of packaging, and this is an application that cannot be displaced by digital media (...)



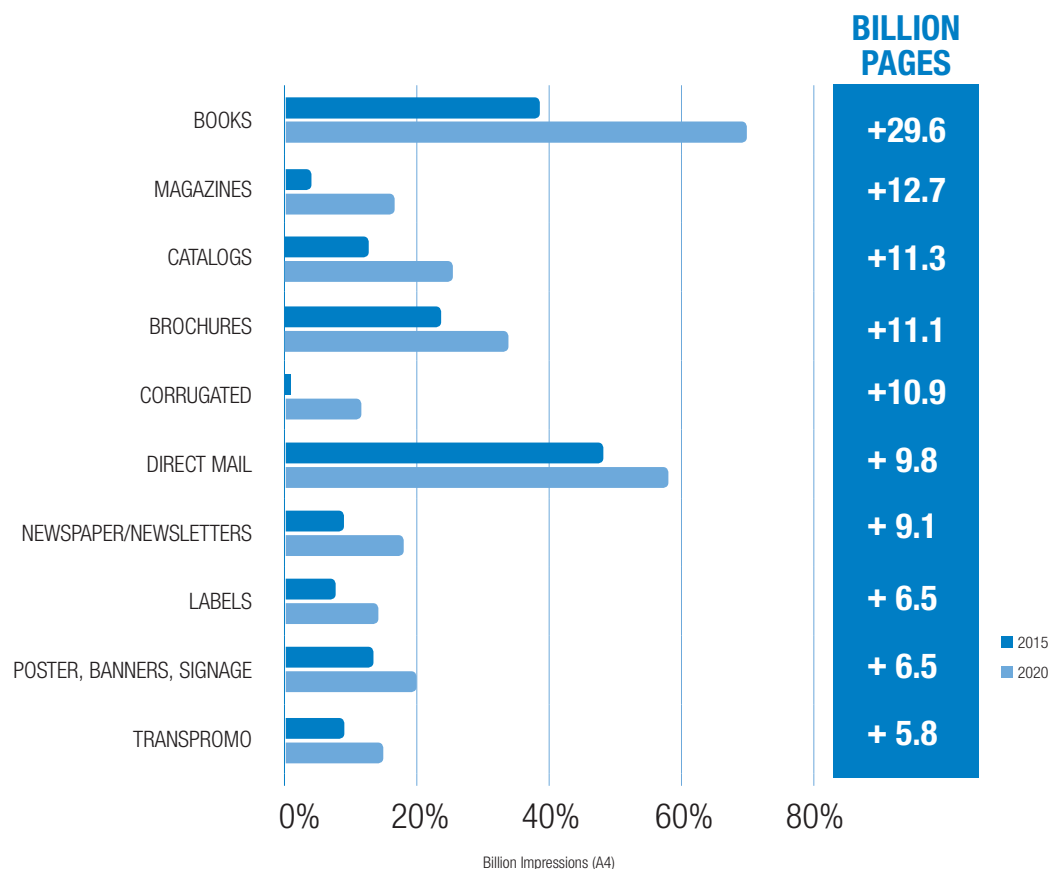
INFOTRENDS' LATEST FORECAST DATA PROJECTS THAT DIGITALLY PRODUCED PACKAGING WILL DEMONSTRATE A COMPOUND ANNUAL GROWTH RATE (CAGR) OF **20.7%** BETWEEN **2014 AND 2019.**

BARB PELLOW, KEYPOINT INTELLIGENCE INFOTRENDS
STATED IN A WHITE PAPER COMMISSIONED FOR KONICA MINOLTA

THE RIGHT APPLICATION MIX

Production inkjet is application-driven. InfoTrends publishes an application forecast that projects the growth in digital page volume for specific applications. The application with the biggest gain in pages is books. Other applications - direct mail, magazines, catalogues, and brochures - are also expected to show very high gains. There are also many new and emerging opportunities in corrugated and folding carton package printing.

FASTEST-GROWING APPLICATIONS BY ABSOLUTE PAGE VOLUME GROWTH



SOURCE: WESTERN EUROPE DIGITAL PRODUCTION PRINTING APPLICATION FORECAST: 2015-2020, INFOTRENDS 2016

PATENTED LED UV B2+ INKJET PRINTING PROCESS

Konica Minolta has developed Dot Freeze Technology™, a patented LED UV curable inkjet printing process that prints perfected high definition images in a single print process on the widest range of materials without the need for priming or post coating processes - independent of sheet thickness or material type, be it coated or uncoated.

Making the AccurioJet KM-1 the most flexible digital press in the world, Konica Minolta's Dot Freeze Technology™ controls the printed dot on contact with the material, preventing ink dots coalescing or bleeding. The ink has been designed to have a high viscosity at room temperature and a much lower viscosity when being jetted. This unique high viscosity ink system is only possible due to the specially designed Konica Minolta printhead technology used within the AccurioJet KM-1.

As the ink is heated inside the ink delivery system, the viscosity drops to a level that allows reliable jetting. Once ejected the ink droplets instantly cool increasing the viscosity, which thickens the ink. This "freezes" upon contact with the substrate preventing uncontrolled movement of the ink dot and avoiding too deep penetration of the ink into uncoated materials. The result is exceptional colour stability on both coated and uncoated materials in the widest working temperature environment of any digital press in the world. Users achieve sharp crisp text and a wide gamut with vibrant colours that jump off the page.

LED UV curing technology applies minimal heat to the substrate and is designed to deliver consistent results for thousands of hours of operation. Since UV curable inks are used, there is no water to be driven out of the print, which eliminates the issues associated with drying such as material distortion, ability to perfect and excessive heat.

To enable Dot Freeze Technology™, Konica Minolta developed a variety of inkjet technologies such as a new 1200 dpi printhead and a patented ink formulation. To further enhance the output quality of the press, an image correction system can check the print quality of every sheet printed giving the printer the peace of mind that customers receive the highest level of print quality.

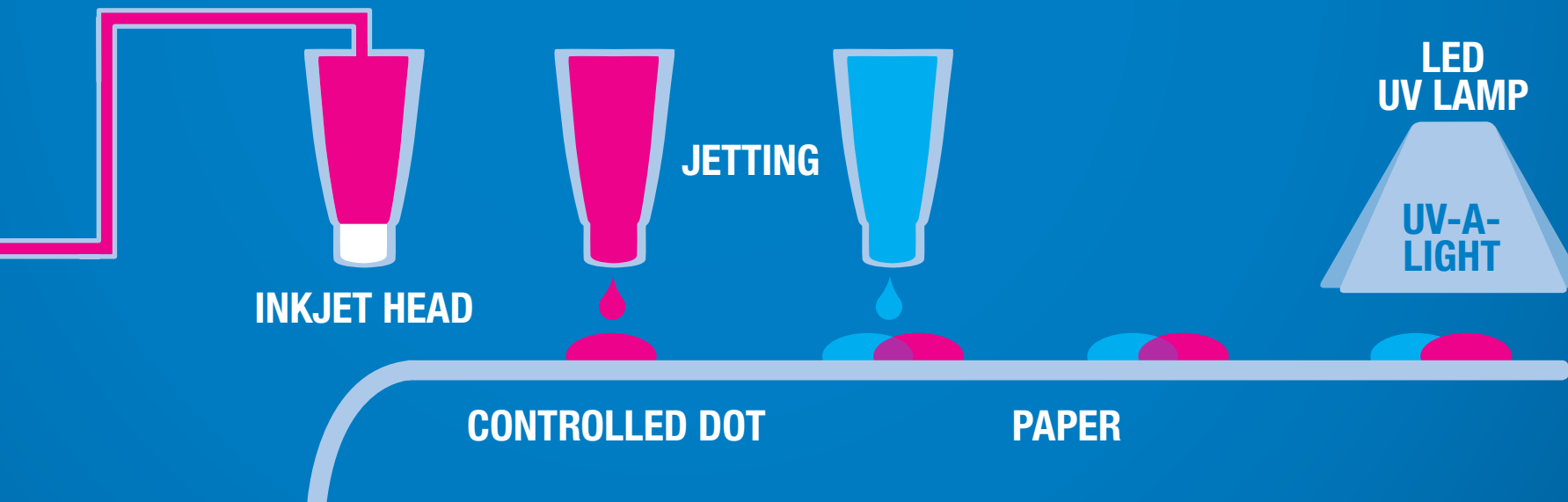


**INK
TANK**

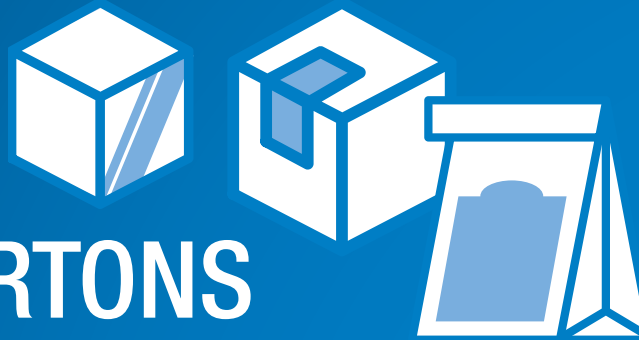
KONICA MINOLTA LED UV INK “DOT FREEZE TECHNOLOGY™”



PROCESS		INK TANK	JETTING	ON PAPER	CURED BY LED UV
VISCOSITY	HIGH	HIGH VISCOSITY	LOW VISCOSITY FOR STABLE JETTING		HIGH VISCOSITY FOR CONTROLLED DOT
	LOW				



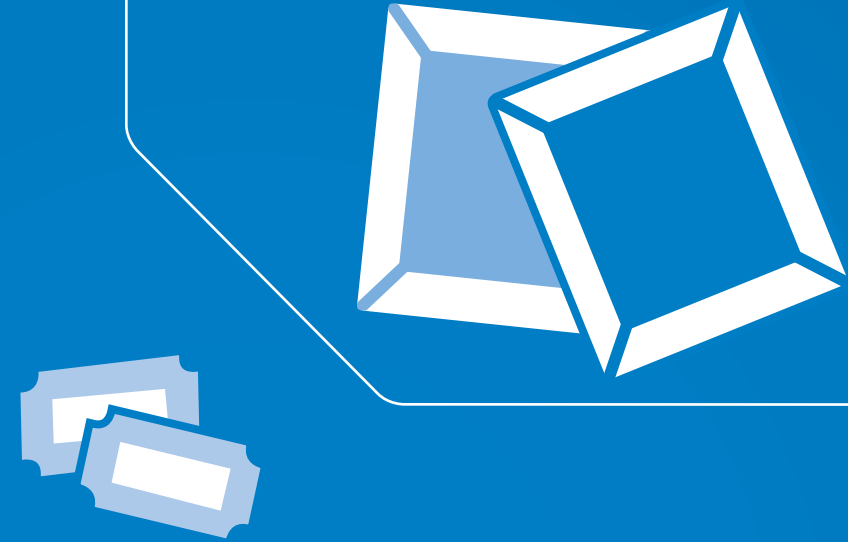
**PACKAGING,
FOLDING CARTONS**



**BOOKS,
BOOK JACKETS,
BROCHURES,
MAGAZINES**



**DIRECT MAILINGS,
INSERTS,
COUPONS**



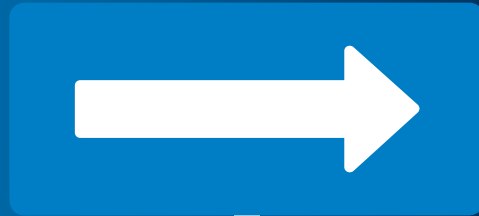
**GREETING CARDS,
BUSINESS CARDS**



**FINE ART,
PHOTO MERCHANDISE**



**POSTERS,
BANNERS,
SIGNAGE**



TYPICAL APPLICATIONS

The AccurioJet KM-1 gives you the flexibility to print on almost any substrate – from heavy textured stock, folding carton, bible paper, through to never tear expanding your application list and market potential. LED UV printing achieves excellent results for a wide range of applications, especially for the commercial sector.





AccurioJet KM-1

10 GOOD REASONS

to invest into Konica Minolta's
revolutionary digital inkjet colour
printing technology.

1

DOT FREEZE TECHNOLOGY™

Allows to perfectly colour match jobs with repeatable results within a tolerance of ΔE 1.5. This patented process ensures ink can jet perfectly allowing jobs to be instantly moved to finishing saving time and money.

5

HIGH IMAGE QUALITY

New high-definition print heads provide top image quality of 1200 dpi to create for example superb skin tone with less graininess and a natural-gloss look.

2

UNMATCHED PRODUCTIVITY

Not only 3,000 sheets per hour, but no plate-making, perfecting, ease of operator maintenance, automatic self-cleaning make this system a real workhorse.



3

UNPARALLELED MEDIA HANDLING

Enhanced applications and productivity thanks to the traditional offset material handling system. Mechanical front and side lays combined with material grippers deliver best in class registration.

4

WIDER RANGE OF PRINT SERVICES

Prints on a wider range of offset coated and uncoated substrates, and newly incorporates canvas, foiled carton stock, plastics and labels.



6

UNRIVALLED UPTIME

Trusted offset technology as its basis makes AccurioJet KM-1 robust and reliable and keeps it constantly available for production at the highest level.



7

WELL EQUIPPED FOR PACKAGING MARKET

The AccurioJet KM-1 is perfectly matched for the packaging market due to its versatility to print on a wide range of materials up to 0.6 mm.



OFFSET QUALITY IN A SINGLE PRODUCTION STEP

Prints more jobs much faster, e.g. direct mailings in one production step instead of printing offset shells first, followed by black overprinting for the text.

10

THE “SWISS ARMY KNIFE” OF PRESS TECHNOLOGY

Combines a multitude of digital advantages with quality and speed on offset level for fastest production of sophisticated print products.



9

GROWING DIGITAL PRINT MARKET

In the face of shorter lead times and run lengths as well as increasing job numbers, AccurioJet KM-1 is the perfect choice for digital print production.

TECHNICAL SPECIFICATIONS

SYSTEM SPECIFICATIONS

Type	B2+ perfecting sheet fed LED UV inkjet press
Resolution	1,200 x 1,200 dpi
Ink	LED UV ink
Number of colours	4 (extended gamut CMYK)
Printing speeds	3,000 sph (simplex) 1,500 sph (perfected)
Sheet size	Up to 585 x 750 mm
Possible materials	Coated, uncoated, fine art, highly textured art paper, carton board and some synthetics
Sheet thickness	0.06 – 0.6 mm (simplex) 0.06 – 0.45 mm (perfected)
Dimensions	5,400 (W) x 3,000 (D) x 2,400 (H) mm
Environmental temperature	Min. 20 °C to max. 30 °C
Machine weight	Approx. 9000 kg

- Inkjet LED UV ink developed by Konica Minolta for High-definition, Single-pass applications.
- The support and availability of the listed specifications and functionalities varies depending on operating systems, applications and network protocols as well as network and system configurations.
- Specifications are based on the information available at the time of printing and are subject to change without notice.
- Konica Minolta does not warrant that any prices or specifications mentioned will be error-free.
- The specifications noted above are subject to change without notice.
- All brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged.

DIGITAL FRONT END (DFE)



DIRECT
CONNECTION
FROM DFE

CTP WORKFLOW

CTP

OFFSET

FINISHING

HYBRID PRINTING

INLINE FINISHING

SLITTING
ROTARY DIE-CUTTING
BOOKLET MAKING
POST-PRINT TREATMENT
VARNISHING





PROKOM – CONNECT WITH INDUSTRY CONSULTANTS AND GAIN VALUABLE INSIGHT

Konica Minolta is a proud supporter of the independent user association PROKOM, who offers its members the ability to connect with industry consultants and gain valuable insights.

Structured learning programs support all elements of your companies' business. From business planning through sales and marketing advice, you will have the opportunity to link in with the PROKOM team, connecting you with companies across both Europe and North America.

For more details please visit: www.prokom.org.





KONICA MINOLTA

"We are confident that we have made the right investment decision. As the market continues to evolve with the increase of shorter-run length jobs we are transferring these from litho to the AccurioJet KM-1. This will enable us to capitalise on the machine's ability to match offset quality and have quicker job turnarounds, greater efficiency and substantial cost-savings."

Andrzej Nowak, R&D Manager at Chroma

"Being the first company in France to buy the AccurioJet KM-1 reinforces our reputation as pioneers and strengthens our expertise in the graphics chain, allowing us to support our customers better in post-print processes."

Rémy Barelli, Co-Founder of Realisaprint.com