Modular Solutions.
Endless Applications.

Using premium technology to expand - and win - new markets.

- *VERSAPASS*®

- *DURALINK*®

- *DURAFLEX*®

memjet®

Beautiful Precision, Simplicity, and Affordability.

Do more, more easily than ever before. Our partners design innovative printing systems Powered by Memjet for applications such as labels, mailing and addressing, office documents, wide format CAD and graphics, packaging, 3D printing, and commercial printing.

COMMERCIAL PRINT

Sheet-fed and roll-fed inkjet printers are available in different price ranges with productivity and automation being the major cost differentiators. Unlike analog technology, where the same static pages are printed and the costs go down with volume, digital printing allows for "print what you need, when you need it, where you need it" whether in customized versions or personalized 1:1 documents.

Benefits of using digital

- No printing plates required and minimal setup time makes economical production of short runs possible

- Reduction of transportation and inventory costs

- Reduction of spoilage/waste associated with multiple print/imprint steps and product obsolescence

- Faster time to market with fewer steps

Advantages of using Memjet technology

- Flexible solutions using Memjet modular approach

- High resolution for fine detail and color critical jobs

- Fast print speeds and high throughput

- Environmentally friendly, durable aqueous inks

How is Memjet technology being used today

- Transactional and transpromotional

- Direct mail

- Publishing

PACKAGING

The traditional function of packaging was to protect the product during shipment and on the store shelf. Marketing uses packaging to elevate brand awareness and create an emotional connection with the customer. Micro segmentation, promotions and marketing campaigns are driving the need for shorter run lengths and the growth of digital printing.

Benefits of using digital
- Print quality that rivals offset on coated as well as uncoated substrates
- Reduction of finished goods inventory costs and waste with more on-demand printing
- Reduction of setup time and downtime resulting in short turnaround times and faster time to market
- Fast, easy and economical implementation of promotions and marketing campaigns

Advantages of using Memjet technology
- Flexible solutions using Memjet modular approach
- High resolution for fine detail and color critical jobs
- Fast print speeds and high throughput
- Environmentally friendly, durable aqueous inks

How is Memjet technology being used today
- Corrugated board for primary and secondary packaging
- Folding carton
- Flexible packaging

LABELS

Labels are used in a variety of different ways. They are generally printed on paper or film-based substrates and affixed to a container or product. Labels are used for branding as well as to provide nutritional or other information on the product.

Label printing has been transitioning from analog to digital for a number of years. Inkjet label printers are available as roll-fed benchtop printers for small volumes up to higher-volume label presses with integrated finishing equipment.

Benefits of using digital
- No printing plates required. Economical production of short runs.
- Can be integrated with analog printing to create hybrid personalization
- Minimal make-ready required resulting in short turnaround times and faster time to market

Advantages of using Memjet technology
- Wide availability of narrow-web and wide-web printing solutions
- High resolution for fine detail and color critical jobs
- Fast print speeds and high throughput
- Environmentally friendly, durable aqueous inks

How is Memjet technology being used today
- Product labels
- Hazard labels

WIDE FORMAT

From fine line drawings to heavy ink coverage banners, posters and tradeshow graphics. Today, inkjet printing covers a very large range of applications on many different substrates with stunning image quality. Single pass inkjet printing has just recently started to disrupt some of the wide format applications by enabling highly productive inkjet printers that can replace multiple wide format printers using the traditional scanning printhead technology.

Benefits of using digital
- High image quality
- Faster turnaround times and efficient end to end digital workflows
- High productivity with single pass technology

Advantages of using Memjet technology
- Modularity enables design pf products with small footprint
- Easy and rapid integration with availability of Memjet designed print engines and modules
- Single-pass printing for high productivity applications
- Environmentally-friendly aqueous inks

How is Memjet technology being used today
- Architecture, engineering and construction
- Geographical information systems – maps
- Instore signage

MAILING AND ADDRESSING

The envelope was once an afterthought. Marketers and printers spent significant time on the content that would go into the envelope but often overlooked the opportunity for content on the outside of the envelope. Digital printing technology is changing all of that. Today, envelopes are doing more than just holding the message. They are the message.

Benefits of using digital
- Variable data capabilities for personalization, higher open rates, and greater customer engagement
- Reduced inventory costs through on-demand printing
- High-quality images on envelopes

Advantages of using Memjet technology
- Flexible solutions for any volume thanks to Memjet's modular approach
- High print speeds for high productivity applications
- Environmentally-friendly, durable aqueous inks

How is Memjet technology being used today
- Envelope printing including padded envelopes

OFFICE AND DOCUMENT

Financial institutions, universities, law offices, government agencies and more, all have the need for printing high volumes of documents. Single pass inkjet printers provide the productivity, quality and cost effectiveness for printing large volumes on demand and inhouse.

Benefits of using digital
- Simple, fully digital workflow
- No need for pre-printed forms. Print all content in one pass.
- Fast turnaround times

Advantages of using Memjet technology
- Modularity allows the design of printers with a small footprint
- Easy and rapid integration with availability of Memjet designed print engines and modules
- Single-pass inkjet provides high print speeds
- Environmentally friendly aqueous inks

How is Memjet technology being used today
- Flyers
- Business forms
- Direct mail
- Letterheads

3D PRINTING

3D printing is set to revolutionize manufacturing. Instead of waiting weeks for a prototype, a fully functional prototype can go from design to finish within days. Parts can be manufactured on demand removing a number of design and manufacturing constraints.

Benefits of using digital
- Rapid turnaround time for customized products
- Faster setup time
- Zero tooling costs and increased automation

Advantages of using Memjet technology
- Easy and rapid integration with availability of Memjet designed print engines and modules
- High print speeds

How is Memjet technology being used today
- Full color decorative figures

Memjet offers 3 different print technology platforms that are used in a multitude of different industrial and commercial printing applications. **VersaPass** offers easy and low-cost integration with print engines and aqueous dye-based inks.

Based on aqueous pigment inks and a 4-color printhead, the flexibility of **DuraFlex** enables OEMs to design printers for benchtop applications to light production.

DuraLink is the affordable modular print system with aqueous pigment inks, which OEMs can use to build customized high-speed presses with print widths up to 2.5 m (100 in).

VERSA*PASS*®

A VERSATILE & MODULAR PRINT TECHNOLOGY SYSTEM

VersaPass® is an aqueous dye-based, single-pass digital print system based upon a 222.8 mm (8.77 in) wide printhead. OEMs can choose from a series of different print engines or a components set to quickly and easily design print solutions for a variety of applications.

The Delphax Printhead

VERSAPASS PRODUCTIVITY

1600x1600 dpi and a drop size of 1.2 pL provide highly detailed prints with smooth transitions. Depending on the print engine, the printhead is configured to print with one or four colors, creating an ideal balance between cost and productivity for the individual applications.
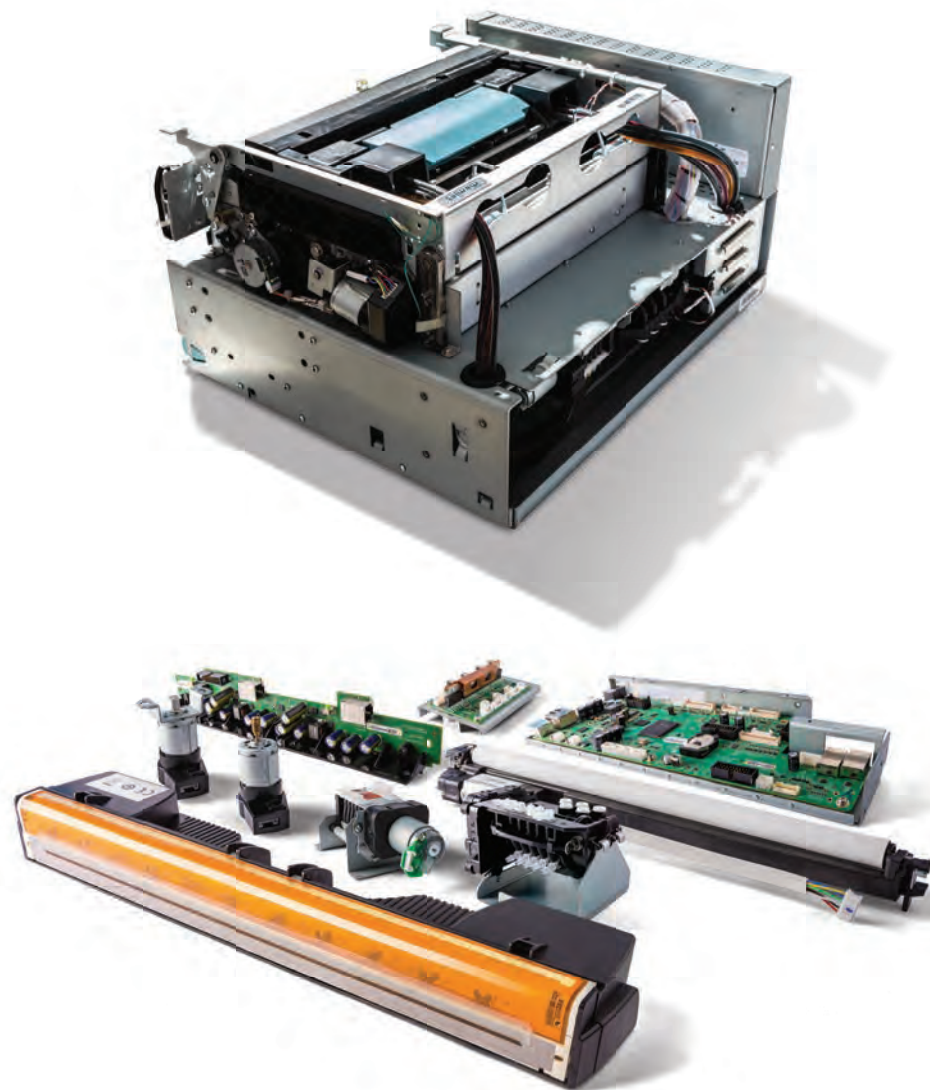
VersaPass-based OEM print solutions are widely available today for a wide range of applications. Anything from entry-level benchtop label printers up to economical commercial printing presses as well as wide format printers for flexible packaging applications.

VERSAPASS ENGINES AND COMPONENTS SET

Pre-configured engine designs simplify the development and reduce the OEM development time. The VersaPass engines reduce the time to market by combining the ink delivery, maintenance, component electronics and paper path into 3 different compact units. A wide range of different OEM print solutions in the market today are based on the VersaPass print engines. Anything from entry-level benchtop label printers through wide-format printers for a range of applications, to commercial printing presses.

The VersaPass components set is designed for OEMs who need more flexibility in the design of their products and have an existing media path. The VersaPass components set enables above the web maintenance and is available with two different ink delivery options.
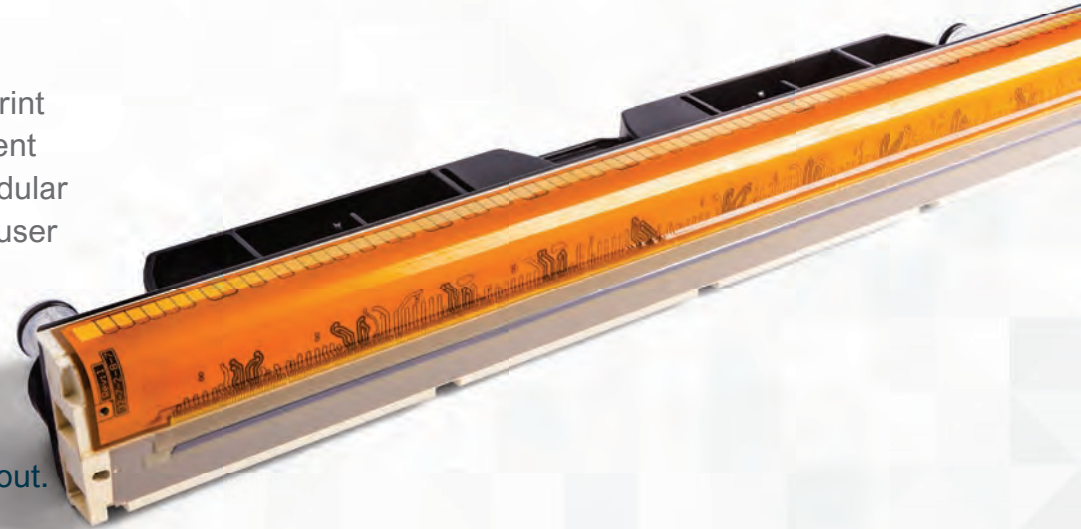
DURALINK®

A MODULAR PRINT TECHNOLOGY SYSTEM

DuraLink® is the high-volume production, single-pass print platform coupled with Memjet's durable aqueous pigment inks. This highly configurable system is made up of modular components that allow OEMs flexibility in building end-user printing solutions.

The core printing system is built on Memjet's proven single-pass MEMS inkjet printhead, which has 70,400 nozzles in a 1600 dpi redundant 5-row, single-color layout.
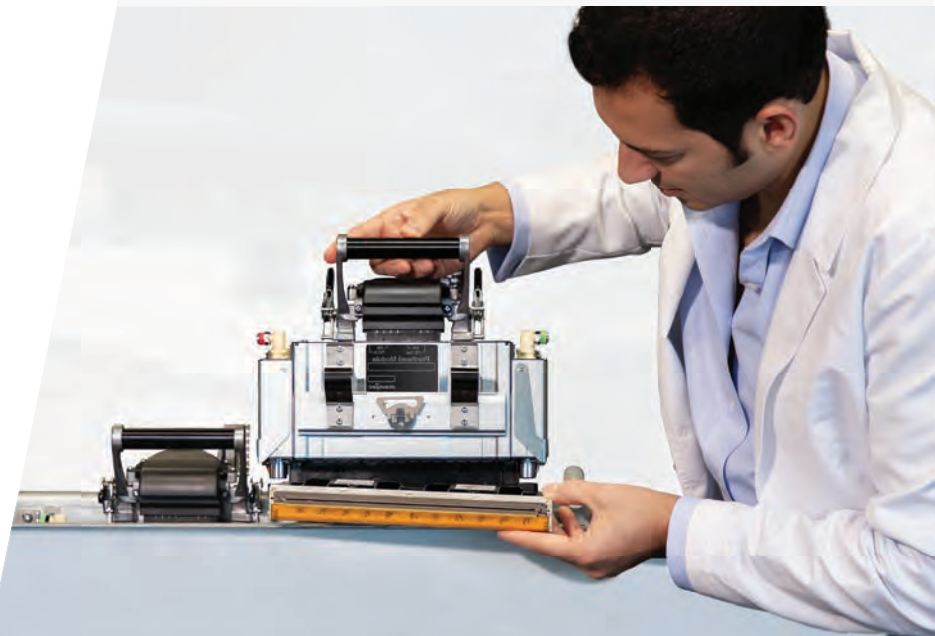
DURALINK DURABILITY

THE COMPLETE DURALINK PRINTING SOLUTION

The DuraLink 222.8 mm (8.77 in) printheads can be stitched together horizontally to form a super-wide output of up to 2.5 m (100 in) and a complete printing solution can be constructed using multiple bars to achieve up to seven (CMYK+OVG) colors. The complete DuraLink system couples the printheads with other components that handle ink distribution, aerosol handling, cleaning/maintenance, and overall system monitoring and timing.

DuraLink is available in two versions – the standard DuraLink printhead is rated for 1 billion ejections per nozzle, or 50 L of ink, and DuraLink XL is rated for 4 billion ejections per nozzle, or 200 L of ink. DuraLink was built to be durable and robust, printing millions of pages (depending on coverage) before requiring a quick and simple user replacement that can be done in minutes, usually during paper changes or during scheduled maintenance.

DURALINK XL PRODUCTIVITY
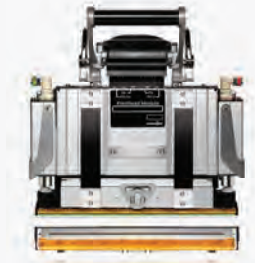
DURALINK XL PRINTING SYSTEM EXTENSION

DuraLink and DuraLink XL productively print at speeds from 74.5 m/min (244.5 ft/min) at 1600x1585 dpi and up to 203.6 m/min (668.1 ft/min) at 1600x580 dpi with a 2.1 pL drop size. It produces extremely fine detail and rich color on a wide variety of media – including traditional uncoated papers, inkjet treated matte and gloss papers, corrugated, board, label, and inkjet ready films.

With the speed, quality, and durability demanded by print providers and converters – DuraLink is the ideal imaging system at the heart of many productive and unique OEM print solutions.
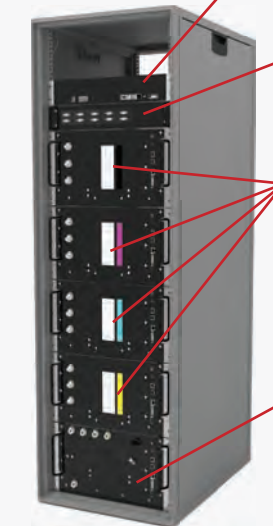

DuraLink Printhead

DURALINK MODULARITY

1 Printhead module:
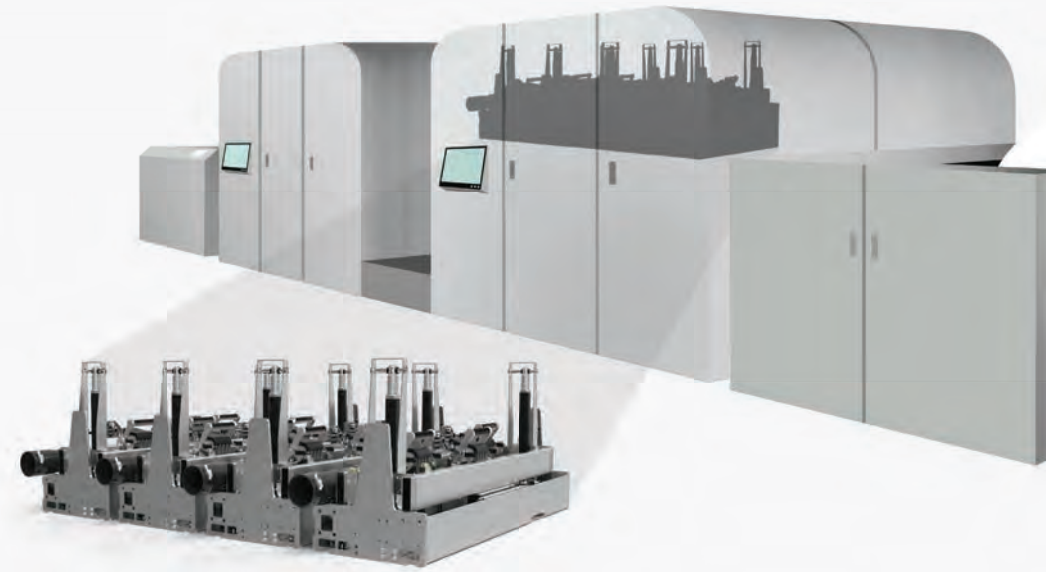Provides an interface from the printhead to rest of the press

2 Maintenance module:
Prepares printhead for printing and caps when not in use

3 Print bar interface module:
Distributes timing signals to synchronize printing

4 Print engine supervisor module:
Controls all modules within a press

5 Dongle dock module:
Interface for quality assurance system

6 Ink supply modules:
Filters, degasses and transports the ink from a bulk container to the printhead module at a controlled pressure

7 Waste ink management module:
Provides controlled vacuum to support action of the maintenance module

8 Software:
Print engine supervisor interface and GUI

The flexibility of DuraLink's modules gives OEM partners a faster, cost-effective way to meet their business objectives.

Three Modular Solutions **18**

*DURA*FLEX ®
A FLEXIBLE PRINT TECHNOLOGY SYSTEM

DuraFlex® is Memjet's latest single-pass printing platform based upon a 4-color printhead in A4 and A3+ widths, a modular set of compact components and a durable aqueous pigment ink.

The modular approach provides OEMs with the lowest development costs and fastest time to market. All modules were designed to work with each other and tested extensively by Memjet. Using the proven printhead chips from Memjet's DuraLink technology, DuraFlex provides long-life printheads, minimizing the intervention rates and associated costs for the end customers.
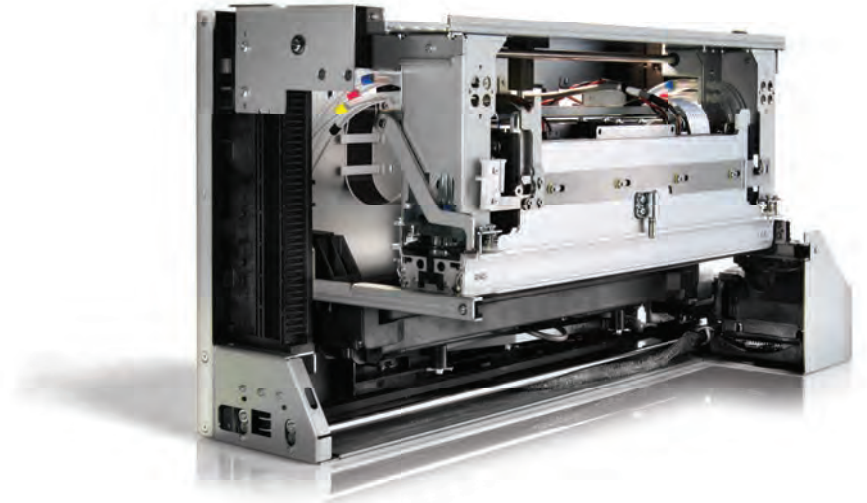
With a long-life printhead, a resolution of up to 1600x1600 dpi, a drop size of 2.1 pL and print speeds up to 46 m/min (30 in/sec), DuraFlex provides best-in-class image quality and print speed performance for print technologies in this product class.

DURAFLEX FLEXIBILITY

The modularity also provides OEMs great flexibility in designing print systems for different applications and markets. Choose between an A4 or A3+ wide printhead or stitch up to four A3+ printheads together for print widths up to 1270 mm (50 in). Use the modules with different media handling systems such as cut sheet, roll-to-roll, or belt driven applications.

When it comes to speed, simplicity and affordability in full-color digital printing solutions, DuraFlex sets the standard for anything from benchtop to light-production printing.

POWER TO THE OEM

By choosing Memjet technology to power printers, OEMs make a strong statement about the core value of their brand and their solution.

Our team is constantly researching how to make the printhead, modules and ink better for today and for the future. We are always asking how we can make the end user succeed and investigating how our technology can provide the solution.

In the future, it will not just be about printing on paper; it will be about using technology to brand or mark a variety of materials. That's why we research applications and designs that challenge the idea of what printing technology can do.

Memjet's focus on learning is what drives our innovation. We are always listening to our OEMs' feedback, because that makes us better and allows us to improve our products and services.

WE ARE R&D

See the difference Memjet makes for your printer, your business, and your customers' success. Contact us for more information: **Leads@memjet.com**

JASON THELANDER
CHIEF TECHNOLOGY OFFICER

JULIE HOGAN
VP OF RESEARCH & DEVELOPMENT

memjet ®