*DURA*CORE™

PRECISION MEETS ECONOMY

memjet®

Beautiful Precision, Simplicity and Flexibility

A New Era of Precision and Economy

DuraCore is the ultimate high-resolution, economical print solution for OEM's seeking to capture strong efficiency gains alongside exceptional print quality. This cutting-edge print technology delivers reliable performance, stunning output, and exceptional value.

Memjet is pleased to introduce the powerful value proposition of DuraCore. DuraCore is a scalable solution that maintains Memjet's high print standards at an attractive price point for mid scale production. Its focus on efficiency and performance is evident in its design and functionality. The print engine is equipped with advanced features such as intelligent printhead control, precise ink delivery systems, and optimized print algorithms. These features work together to ensure consistent and high-quality prints, minimizing wastage and maximizing productivity.

Outstanding Print Quality with DuraCore
DuraCore technology delivers outstanding print quality across bench-top, wide format and light to medium production applications. Engineered for efficiency, DuraCore combines Memjet's advanced printhead technology with a cost-effective build to ensure your products meet the market. The series includes the DuraCore 1x1 Print Engine with a single printhead and DuraCore Tandem, which houses dual printheads for increased speed. The DuraCore platform can deliver print resolutions up to 1600 DPI. This pinpoint accuracy is maintained across enviable speeds, making DuraCore a highly efficient performer. Built for flexibility, DuraCore delivers full bleed CMYK color for sheet-fed, web-fed, simplex, and duplex printing.

DuraCore Tandem

Ink Delivery System

Leverage Advanced Printhead Technology
Experience exceptional resolutions with Memjet's proven proprietary printhead technology. The DuraCore 1x1 Print Engine has a single head design that includes a 12.69 inch printhead. The printhead can jet 150 or 240 liters of ink and deliver 2 times nozzle redundancy per color for enhanced performance. DuraCore Tandem has two 12.69 inch printheads with an impressive 4 times nozzle redundancy.

Ensure Easy Operation and Maintenance
DuraCore has been designed to be operated easily by a cost effective workforce of non-expert employees. Remarkably simple to use and providing seamless connection to additional print system components, DuraCore can enhance productivity and profit. The system's design goes beyond technology and functionality to focus on end-user experience. Streamlined processes and maintenance systems provide an intuitive and fluid operating experience.

Suitable to a Wide Range of Applications
DuraCore is a multipurpose print solution that serves numerous markets. Combined with Memjet's proprietary printhead technology and inks, it is suitable for high-quality printing across a wide range of applications including: books, manuals, promotional materials, envelopes, direct mail, transactional and security printing, identification, general purpose digital commercial printing and packaging applications such as labels and folding cartons.

Seeing is Believing.
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Streamline Your Production Process

DuraCore's innovative, modular design allows OEMs to easily integrate the print engine and ink module into existing print systems, reducing development time and cost. This modularity also simplifies maintenance procedures to best serve the needs of end users.

DuraCore is easily integrated into a wide variety of print solutions, reducing development costs and expediting commercialization. Its reliable and versatile ModBus architecture enables OEMs to rapidly design and configure effective printing systems with integrated process controls. This means DuraCore is easily reconfigured to serve multiple applications, markets and price points. The end result is reduced investment expenditure and increased ROI.

Reduce Maintenance Times
DuraCore delivers outstanding print quality for thousands of prints without pause for maintenance cycles. The reduced need for maintenance adds to DuraCore's attractive productivity profile.

Deliver Automation and Simplicity
Further productivity gains come from the ease at which DuraCore can run consecutive jobs, one after another. Automated printhead calibration means image quality is retained from job to job. And automated configurable rapid maintenance cycles mean minimal downtime. The print engine's rapid start up cycle aids the process, and even periodic printhead replacement can be done quickly and easily without the need for skilled technicians. All this translates to a high throughput and outstanding asset utilization.

Access a Sophisticated Digital Front End
DuraCore is easily integrated into existing systems, and is compatible with Xitron's market leading digital front end (DFE). The configurable Xitron RIP and Navigator controller streamline interaction between the print engine and all aspects of the printing process. This delivers extensive process control, system automation, and real-time status of consumable levels, press components and environmental conditions.

DuraCore Ink
DuraCore uses Memjet's durable pigment, fast-drying aqueous ink to deliver market leading image quality. This environmentally friendly ink has been developed for use on food packaging and other indirect food contact applications by ensuring that all components are listed on the Swiss Ordinance. It is water-based ink that is free of hazardous UV ink components such as 4-methyl-benzophenone, benzophenone and phthalate esters.

KEY FEATURES

Exceptional print quality • Optimal precision • Easy integration • Rapid start up • Robust build • Multi-shift use • Electronic printhead positioning • Auto color registration • Fast printhead maintenance and replacement • 2 to 4 times nozzle redundancy • Advanced aerosol extraction • Media path tension control • Dryer intensity control • Temperature and humidity monitoring • Cloud-based data capture • High value productivity insights • Memjet support throughout the entire print process.

DuraCore Print Engine Specifications

Parameter	DuraCore 1x1	DuraCore Tandem
Color printing	CMYK	CMYK
Number of printheads	1	2
Ink type	Aqueous pigmented	Aqueous pigmented
Print width	322.4 mm (12.69 inches)	322.4 mm (12.69 inches)
Print speeds / resolution modes (Addional modes available)	46 mpm at 1600 x 954 dpi 27 mpm at 1600 x 1600 dpi	137 mpm at 1600 x 640 dpi 108 mpm at 1600 x 816 dpi 69 mpm at 1600 x 1280 dpi
Print engine dimensions	Across web: 680mm (26.8 inch) Down web: 250mm (9.8 inch) Height: 385mm (15.2 height)	Across web: 680mm (26.8 inch) Down web: 700mm (27.6 inch) Height: 450mm (17.7 height)
Printhead redundancy	2 times	4 times
Printhead to media spacing	Configurable and automated	Configurable and automated
Ink tanks	10 L default, 55 L option	10 L default, 55 L option
Printhead life	150 or 240 L per printhead	150 or 240 L per printhead
Ink delivery system	Included	Included
Digital Front End SW	Xitron RIP Available	Xitron RIP Available
PC server	Available	Available
Communication protocol	ModBus TCP, TCP/IP	ModBus TCP, TCP/IP
Interactive HMI / system dashboard	Integrated into DFE	Integrated into DFE
Media profile library	Included	Included
Maintenance modes	Configurable/automated	Configurable/automated
Duplexing controls	Optional	Optional
Dryer control	Optional	Optional
Splice detection and response	Optional	Optional
Environment-based controls	Optional	Optional
Aerosol extraction	Included	Included
MCS 2.0 Agent	Available	Available

LEARN MORE

BEAUTIFUL PRECISION, SIMPLICITY and AFFORDABILITY

DURACORE™
Precision Print Engine
2 x or 4x Nozzle Redundancy

Print speeds up to
450 feet per minute

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