

Markoprint

HIGH QUALITY MADE IN GERMANY

WE MAKE IT WORK

PRODUCT OVERVIEW



ART OF CODING

The “Markoprint” brand offers you marking solutions precisely tailored to your needs, with more than 50 years of experience.

Starting with the Jetpen, which employed thermal inkjet technology, a large character printer using a piezo electric printing module soon followed, making it possible to inkjet print both small and large characters.

Over the following years, in conjunction with our partners, the technologies were developed further with one notable milestone being the introduction of the iJET, a printer capable of handling highly complex marking requirements such as variable 2D barcodes for the pharmaceutical industry or postal applications with up to 50 variable codes being printed each second.

Due to the ever more complex networking requirements of today’s industrial facilities, the focus is moving from simple surface printing to self-sufficient networked systems with shared intelligence. Today’s generation of Markoprint printing systems fulfill these new requirement profiles with variable high-speed printing, serial printing of complex databases, support for True Type fonts and Unicode character sets.

At Markoprint, the printer development program is always continuing, so you can look forward to the integration of new technologies such as UPC/US and full access via mobile devices to always provide the best solution for industrial marking.



The Jetpen of 1991 on the basis of thermal inkjet technology

MISSION STATEMENT

The core of our business is the creation of innovative marking solutions, customer-focussed service and the cooperation of a worldwide network of high performance partners.

HIGH QUALITY, MADE IN GERMANY

The best materials, the most innovative ideas, this is our product material, preferably made of one piece. A guarantee for durability, sustainability and your success.



Andreas Bluhm,
VICE

“ With our wide range of printing systems and technologies, Markoprint coding solutions meet every system environment and customer requirement. Whether large or small fonts, high-speed applications in pharmaceutical or automotive industries, rough industrial environments, we offer the right system for every application. ”

Our projects result in first-class, highly complex solutions that are still straightforward to use. To achieve this goal, the Markoprint team is part of a strong global community. We do not only focus on the German market: our worldwide network of distributors and trading partners is the core of all previous and future developments. They are the key to the implementation of market requirements and a central part of our product development program.



Please contact us or visit us at www.markoprint.com

integra PP RAZR, the new printer from Markoprint, with its flexible application options in all operating environments, corresponds exactly to the industrial marking profile.



STATE OF THE ART

Which printing technology would you like to use? Wherever printing takes place, there is a high-quality, reliable technology available:

Printhead design "Made in Germany"

Markoprint is the only manufacturer in the world that can control five print technologies. The flexible and future-proof print technologies of HP Class, LX Class, MX Class, XR Class and PP Class offer complete consumption control and ensure a perfect print image on almost all products.

THERMAL INKJET TECHNOLOGY

- Clean - new printhead with every cartridge
- No maintenance
- Intelligent ink cartridges
- Small and compact printheads
- Flexible and variable in application

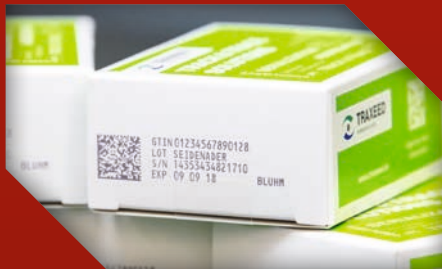
HP CLASS

- Print heights up to 12.5 mm with up to 600 dpi
- High resolution up to 900 x 600 dpi
- 180 m/min at 300 dpi
- Click'n Print cartridge holder
- Large variety of inks
- Bulk / Large Volume Ink Support



LX CLASS

- Print heights up to 12.5 mm with up to 600 dpi
- High resolution up to 900 x 600 dpi
- High print speeds up to 240 m/min at 300 dpi
- Up to 10 mm print distance to the product
- Excellent print quality



PIEZO TECHNOLOGY

- Non-Stop Printing integrated
- Efficient due large ink tank
- IQ Supplies
- Optimized maintenance intervals
- High speed
- Font heights from 1.5 - 108 mm
- Printing on different materials



markoprint.com/technologies

PP CLASS

- Top quality printing of barcodes, small fonts (from 1.5 mm) and detailed logos
- Print heights up to 108 mm with up to 360 dpi with integra PP 108 or up to 34 mm with up to 600 dpi with integra PP RAZR
- Recirculating ink system on the integra PP 108 for uncomplicated use

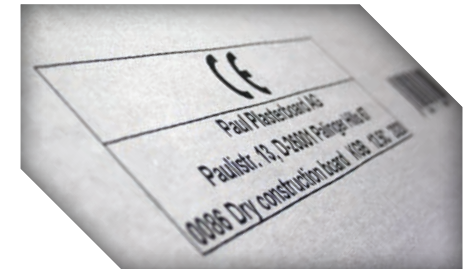


XR CLASS

- Optimized for many applications
- Print heights up to 71 mm with up to 180 dpi
- Optimized for large barcode and big letter text prints
- Perfectly suited for detailed logo prints

MX CLASS

- Print heights up to 50/100 mm with up to 192 dpi
- The standard for industrial PIEZO marking
- Optimized for large barcode and big letter text prints



INK 4.0

Markprint HP Class and LX Class printing systems use an intelligent chip, integrated into the consumables cartridges, enabling communication between those and the printing system.

Auto-Setup allows automatic settings of the various ink parameters. Further advantages of consumables – IQ Supplies:

- Real-time ink level control
- Guarantee of continued print quality

Integrated RFID chips enable the latest generation of piezo printing systems, the integra PP 108 and integra PP RAZR, to recognize the ink type automatically.



markprint.com/inks

INNOVATION!

RAZR 1

The new solvent-based ink has been designed for use in the innovative Markprint printer integra PP RAZR.

The revolutionary ink is particularly characterized by its greater versatility and adhesion, achieving perfect printing results on both absorbent and non-absorbent materials.

- Content of 250 ml
- Ink cartridge provided with RFID chip - control of the ink level in real time
- Safety in the using of ink



- Recognition of the ink type
- Automatic adjustment of ink parameters

NONSTOPPRINTING

Possible due to intelligent printheads

NonStopPrinting offers a zero downtime solution for maximum system availability.

Thermal Inkjet

Continuous, uninterrupted printing in harsh 24/7 industrial facilities. An intelligent algorithm ensures cartridges are always ready for use.

Piezo Inkjet

All Piezo Inkjets are featured with an integrated "Nonstop" feature. RFID and large ink tanks make it possible to refill consumables while the system is running.

Two-color prints up to 25 mm print height are also possible with the NonStopPrinting printhead. With the water- and solvent-based inks of the HP and LX Class, company logos or warning symbols can be applied quickly and contact-free to absorbent and non-absorbent outer packaging.



premium systems

WE MAKE IT WORK

Systems for industry applications - ready for any challenge. The primary focus in the development of the "Premium" systems was based on:

- Intelligent print systems, compact and highly integrated
- Protection class IP 65 - splash and dust protection available as option
- High speed and modularity
- High performance data management - up to 80 variable codes per second



INNOVATION!

INTEGRA ONE IP LX

We are proud to offer our proven washdown technology (IP PROTECTION) now also with the LX cartridge generation. Complex and demanding applications with high printing speeds and with up to 10 mm print distance to the printing

product are realized without any problems. Many innovations, such as the patented mechanism for holding the ink/printhead unit will convince you!

INTEGRA ONE HP INTEGRA ONE IP HP



- Highly integrated, HP Class printing system
- Developed for system integration
- Support of intelligent consumables
- Operation via iLogik with OLED display
- integra One: Integrated photo sensor for automatic print activation
- IP65 protection class optional



INNOVATION!

INTEGRA ONE IP LX

- Designed for system integration
- Intelligent consumables are supported
- Operation via iLogik with OLED display
- IP65 protection class
- WiFi version optional
- Print speeds up to max. 240 m/min
- Up to 10 mm print distance to the product
- Safe, patent pending, cartridge handling





HP
CLASS



IPJET MK3

- Designed for use in wet and dusty environments (IP65)
- Compact, robust system for easy integration into production lines
- Optimized for vertical forming, filling and closing machines

www.bluhmsysteme.com/mop-premium



HP
CLASS



INTEGRA ULTIMATE

- Evolution in production:
Patented nozzle shutter print head with integrated cleaning function
- Certified according to protection class IP65
- Print heights up to 1" (25 mm)

DIGITAL TUNING FOR YOUR APPLICATION

Buy only what you need, confident of having a future-proofed solution!

Due to years of experience and customer dialogue, we have developed performance levels for the Markoprint printing systems. These are characterized by a simple, flexible and dynamic scalability to the respective application.

Make it your way, we introduce the "Coding Score".

Performance levels of the printing systems:



CODING SCORE

A = PRINT | B = BASIC | C = ADVANCED | D = PRO | E = ULTIMATE

Every Markoprint printing system has been developed for the optimal adaptation into customer requirements.

That means that now and in the future you're safe with Markoprint. The configuration of the system and your production will be perfectly matched. In the future you can easily add performance levels and thus meet new requirements for production and sustainability.

professional systems

HIGH PERFORMANCE

Modular and flexibly - scalable to your requirements, these are the "Professional" systems from Markoprint.

Professional printing systems consist of a print controller which can handle up to 8 printheads in any combination of printing technologies: Depending on the used printing technology, whether small and large characters, high-speed or via a data interface (ERP) - coordinated marking requirements can be realized.



INNOVATION!

INTEGRA PP RAZR

Printing up to 34 mm high, on almost any product surface, is now very easy with the latest printing technology in our integra PP RAZR. The permanent print head impresses with its high print

image resolution, speed and integrated redundancy. Placement in production facilities is no problem due to the very compact design.



INTEGRA PP 108 INTEGRA PP 108 BICOLOR

- Large and high-resolution marking on production lines
- Speed and flexibility in large character marking with superior system performance in the piezo range
- Print heights up to 108 mm
- Print speed up to 150 m/min at 360 dpi
- Recirculating ink system
- Height-independent ink system
- integra PP 108 bicolor:
One system, one print head for two-color printing



CONTROLLER

- X2JET / X4JET for operations at the production line
integra Quadro and integra Quadro² for integration into the production line
- 5 supported printing technologies
- Flexibly configurable for the application
- Multi channel - technology for different printing technologies with one controller
- Speed and start signal can be individually adjusted to the connected printing technology
- Hybrid operation with keyboard / iLogic or touch (resistive)



X2JET X4JET

- Optimized for operations at the production line with up to 2/4 printheads
- The printheads can be individually adjusted to the respective requirement:
1 channel: up to 2/4 printheads of one printing technology
2 channel: up to 1/2 printheads of different printing technologies
- 5.7" touch screen and keyboard for easy operation



markoprint.com/professional



INTEGRA QUADRO INTEGRA QUADRO²

- Optimized for integration into the production line with up to 4/8 printheads
- Compact design for integration into control cabinets or machines
- Developed in cooperation with our machines and installation manufacturers
- iLogic controller and OLED display are available for the integra Quadro, the integra Quadro² is completely designed for integration
- The printheads can be individually adjusted to the respective requirement:
1 channel: up to 4/8 printheads of one print technology
2 channel: up to 4/8 printheads of different printing technologies
4 channel: up to 8 printheads of different printing technologies



standard systems

ALL YOU NEED

Compact and economical, these are the “Standard” systems of Markoprint. Print head and print controller are combined in one housing.

The Thermal X1JET HP systems as version:

- Standard: Unique in its performance and designed for a wide range of applications
- Premium: Highspeed function and optional WiFi connectivity
- Stitch: Whenever space is limited or a print image has to be generated from individual heads

Makes a simple integration into existing production lines possible.

The Standard and Premium versions are equipped with an integrated photocell for product recognition.



X1JET HP Standard MK3



HANDHOLD

The HandHold is the ideal solution for mobile, location-independent product coding with car-

tridge technology. The WiFi option guarantees flexibility of use.

HP
CLASS



X1JET HP Stitch MK3

X1JET HP STANDARD MK3 X1JET HP PREMIUM MK3 X1JET HP STITCH MK3

- Durable housing made of milled and anodised aluminium
- Click'n Print guarantees easy handling. Simply insert the cartridge and the system runs.



X1JET HP Premium MK3

X1JET LX MK3

- Durable housing made of milled and anodised aluminium



X1JET MX X1JET XR

The "All in One" Piezo Inkjet Systems X1JET MX and X1JET XR provide an

- Easy installation and maintenance of the system
- Easy commissioning and venting of the ink system by combining printhead, ink system, cleaning station, control electronics and power supply in one housing.

The easiest way to join the world of inkjets with large characters!

MX
CLASS



XR
CLASS



markprint.com/standard

LX
CLASS

PP
CLASS

HP
CLASS

MX
CLASS

XR
CLASS



HMI DISPLAY

The HMI display is a "high-resolution OLED display" for direct input and controlling of print images. The additional start/stop buttons greatly

simplify operations with data entry handled by the intuitive range of screens.



INNOVATION!

INTEGRA VIVID

Inspired by customer requirements, the integra Vivid stands for modern touch operating technology with an innovative swipe user interface. Print jobs to be processed and the operation of X1JET and PP Class print-

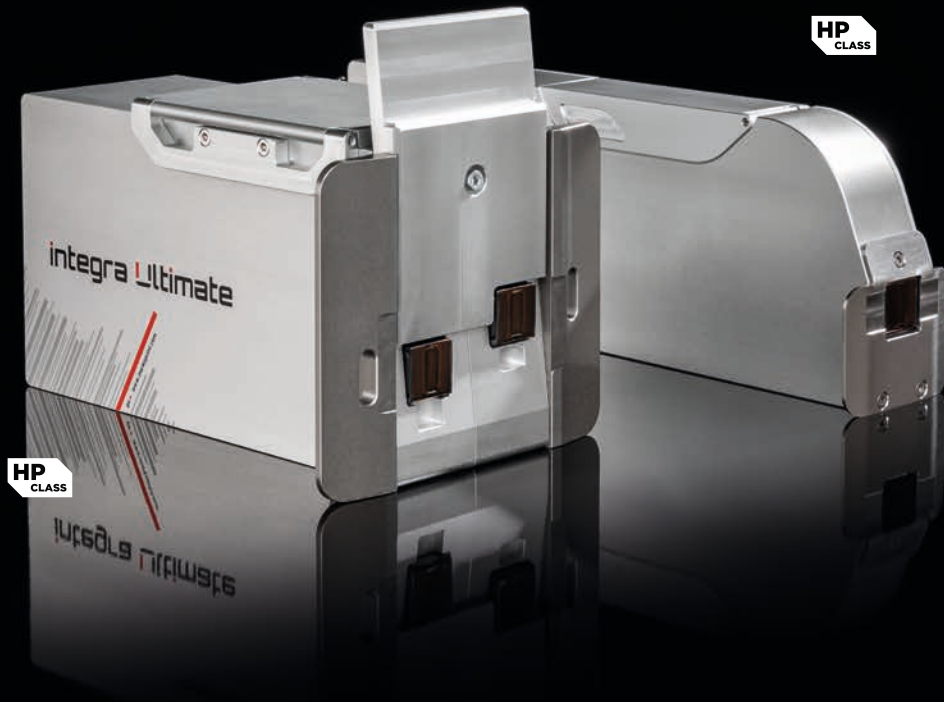
ing systems are now easier and more innovative than ever. The positioning of the 7" high-resolution HMI color display can be freely selected.

IQ SYSTEM-ADD-ONS

You need a perfect reprinting behaviour, even after a longer downtime?

Print systems such as the X2 / X4JET and integra Quadro / integra Quadro², which have proven themselves over several years in the industry, have been extended by additional components.

Hereby we react to the special requirements of the food, wood, pharmaceutical, automotive and beverage industries with innovative products to increase and secure product quality.



INTEGRA ULTIMATE SHUTTER

is certified according to protection class IP65. With this patented print head it is possible to leave the print head in place during wash-down, thus increasing line efficiency. The "integra Ultimate" can print up to 1" (25 mm) images.

The "Shutter Print Head" is also an extension according to IP40 standard, but without "cleaning function". Due to its special design, the print head is optimized for systems in the pharmaceutical industry.



ZTV HP MK2 - BULK SYSTEM

The central HP ink supply MK2 guarantees a high availability and cost savings in equal parts.

Innovative technology, such as the inclusion of intelligent Markoprint "IQ" consumables, combined with our print systems allows this system to be offered with the following printers:

- integra Quadro / integra Quadro²
- integra One
- X2 / X4JET

The ZTV provides the optimal solution for large-scale consumers with cost savings of up to 75% being possible.

Specially developed for use with the 400 ml bulk system, the print cartridges, which actively communicate with the ZTV HP MK 2 to ensure correct fill level at all times.

Markoprint has been a certified partner for this technology since 2017.





LET'S MAKE IT WORK, EASY

Simple, consistent, intuitive and intelligent, that is the brand new integra Command Software from Markoprint.

Due to constantly improving development environments, the functional core of the fast and proven idesign8+ software has been ported, one-to-one, to a new independent platform. The integra Command software as a uniform operating concept for all Markoprint printing systems and printing technologies offers the contemporary user experience, that users know from their operating systems.

Additional operational security is provided by Active Directory user management. For the transfer of production data, all common database formats can be accessed via an ODBC interface.

ADVANTAGES

- Easy installation and intuitive operation
- No training required when changing printing technology or Markoprint printing systems
- Simple and understandable print image design (select print system, design print image, print)
- All Markoprint printing systems and technologies in one software
- Intelligent print images through simple macros in text design
- Superior client server architecture:
 - Central storage location for all print images and resources
 - Increased data security through central print image storage
 - 24/7 monitoring
 - Reporting of production statistics for analysis and optimization of the production process
 - HTTP web server with REST-compliant application programming interface (API) according to OpenAPI Initiative specification

OPERATION

- Free choice of operation: One software for desktop and tablet
- Consistent operation of all Markoprint printing systems
- By using a simple user interface, the program can be operated across all users
- Users:
 - Print image designer (backoffice)
 - System administrator / ERP specialists (automation)
 - Machine operator (Change parameters and control of the printing system)

FEATURES

- Clear layout and monitoring of all connected printing systems:
 - Status display (ink consumption, currently printed data, print counter)
 - Printer setup (print and system parameters)
 - Print management (start, stop, pause, data input)
- Print image design with Unicode support and TrueType fonts: implementation and use of international character sets for global marking
- Additional operational security through Active Directory user management in conjunction with Audit Trail

integra Vivid



Weber
LABELING & CODING SOLUTIONS

European Headquarter

Weber Marking Systems GmbH

Maarweg 33 · D-53619 Rheinbreitbach

Phone: +49(0) 2224 / 7708-0

Fax: +49(0) 2224 / 7708-20

info@webermarking.com

www.weber-marking.com



www.markoprint.com

go ▶ www.markoprint.com

www.weber-marking.com

info@webermarking.com

Fax: +49(0) 2224 / 7708-20

Phone: +49(0) 2224 / 7708-0

Maarweg 33 · D-53619 Rheinbreitbach

Weber Marking Systems GmbH

European Headquarter

www.markoprint.com

