

## **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 conjuction 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 programme 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



## **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 uct material, preferably made of one piece. A guarantor "Made in Germany". Aluminium is our preferred prod-

for durability, sustainability and your success.



Andreas Bluhm. VI7F

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 programme.



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

Integra One IP: the new printer from Markoprint. Fully featured and one of the current high-end solutions for industrial marking applications.



## STATE OF THE ART

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

### **PIEZO TECHNOLOGY**

- Non-Stop Printing integrated
- Efficient due to 500 ml ink tank
- IQ Supplies
- Optimized maintenance intervals

- High speed
- Fonts from 1 108 mm
- · Printing on different materials



- Print heights up to 50/100 mm with up to 192 dpi
- The standard for industrial PIEZO marking
- · Optimized for barcode and text printing



- · Optimized for many applications
- Print heights up to 71 mm with up to 180 dpi
- Optimized for barcode, text and graphic printing



- · The Non-Plus-Ultra
- Print heights up to 108 mm with up to 360 dpi
- Printing of small fonts (from 1.5 mm) and detailed logos
- Optimized for excellent quality barcodes, text and graphics
- Recirculating ink system for ease of use and integration

### THERMAL INKJET TECHNOLOGY

- · Clean new print head with every cartridge
- No maintenance
- Flexible and variable in application
- · Intelligent ink cartridges
- · IQ Supplies



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



### · Print heights up to 12.5 mm with up to 600 dpi

- · High print speeds up to 240 m/min at 300 dpi
- · Higher print distance to the product > 5 mm
- · Excellent print quality



**INK 4.0** 

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

Auto-Setup allows automatic settings of the various ink parameters. Further advantages of consumables – IO 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, to recognize the ink type automatically.





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### **NONSTOPPRINTING**

Possible due to intelligent printheads

NonStopPrinting offers a zero downtime solution for maximum system availability.

### Thermal Inkjet

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

#### Piezo Inkjet

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



# 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
- High speed and modularity
- Protection class IP 65 splash and dust protection available as option
- High performance data management up to 80 variable codes per second





### INTEGRA ONE IP

integra One ip, the new printer from Markoprint, combines all philosophies and is the answer for industrial marking!In cooperation with our partners and customers, this product has been developed

to work in the most complex and demanding applications.

Splash water and harsh environmental conditions are no problem for this printing system.



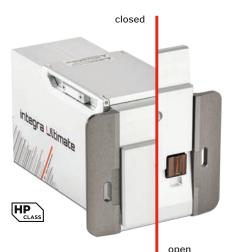
# INTEGRA ONE INTEGRA ONE IP

- Highly integrated, scalable 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



- Designed for use in wet and dusty environments (IP 65)
- Compact, robust system for easy integration into production lines
- Optimized for vertical forming, filling and closing machines





### **INTEGRA ULTIMATE**

- Evolution in production:
   Patented nozzle shutter print head with integrated cleaning function
- Certified according to protection class IP 65
- Print heights up to 1" (25 mm)



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## 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.



High speed and flexibility in coding of large characters with superior system performance in the piezo sector. The integra PP 108 realizes a print height of 108 mm. Together with ink recirculation,

this means "high availability", even with our inkjets for large characters. It enables a new definition of speed and print quality.

### **CONTROLLER**

- X2JET / X4JET for operations at the production line integra Quadro and integra Quadro<sup>2</sup> for integration into the production line
- 5 supported printing technologies
- HP Class, LX Class, MX Class, XR Class or PP Class
- 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)



# X2 JET X4 JET

- 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 2/4 printheads of different printing technologies
- 5.7" touch screen and keyboard for easy operation





# INTEGRA QUADRO INTEGRA QUADRO<sup>2</sup>

- 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 Quadro<sup>2</sup> 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











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# 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:



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

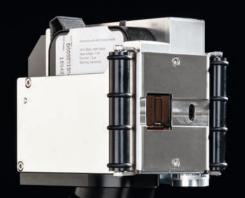
Every Markoprint printing system has been developed for the optimal adaptation into customer requirements.

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.

# **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.







## **HANDHOLD**

HP CLASS

The HandHold is the ideal solution for mobile, location-independent product coding with cartridge technology. The WiFi option guarantees flexibility of use.





HP CLASS

X1JET HP Premium MK3

### X1JET LX MK3

· Durable housing made of milled and anodised aluminium

## X1JET HP STANDARD MK3 **X1JET HP PREMIUM MK3 X1JET HP STITCH**

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



## 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







markoprint.com/standard





### **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.



# **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 Quadro<sup>2</sup>, 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.





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.

### **SHUTTER**

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

Innovative technology, such as the inclusion of in-

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 Quadro<sup>2</sup>
- integra One
- X2 / X4JET

The ZTV provides the optimal solution for largescale 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.







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### **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 print systems and technologies in one software
- Intelligent print images through simple macros in text design



## ONE FOR ALL

Simple, consistent, understandable and intelligent - that's the idesign8 software from Markoprint.

The idesign8 software is a consistent operating concept for all Markoprint printing systems and technologies.

Simple to install and ready to use, the software can be easily operated by using a clear, intuitive user interface with clearly defined symbols.

Additional operational security is provided by integrated user administration. High-speed list prints from databases is fulfilled by a DBPrint module.

### **OPERATION**

- Free choice of operation: one software for desktop, touch screen and remote applications
- · Consistent operation of all Markoprint print systems
- By using a simple user interface, the programme can be operated by all users:

Users can be:

- Print image design office
- System Administrator / ERP Specialists (Automation)
- Technician (terminal, signal plotter)
- Machine operator (start / stop, data input)

### **FEATURES**

- Print image design with Unicode support and True-Type fonts: implementation and use of international character sets for global marking
- idesign Remote: Configuration instead of programming! Universal free data interface for data transfer from ERP or middleware technologies
- Additional security through user administration options
- DBPrint: High Speed Database List Printing
- Status monitor for monitoring all connected print systems
- Management of configuration and parameters of the relevant print system
- Plug and Play USB stick data transfer





### **European Headquarter**

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