MPRINT

a **KURZ** company

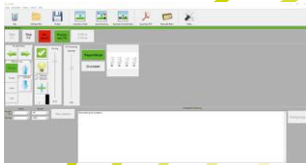# monojet®

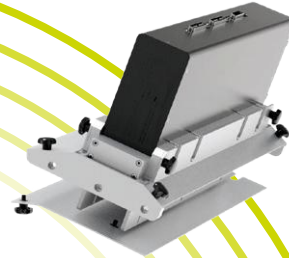**the complete solution for variable packaging printing**

monojet® 108
monojet® 216
monojet® 324
monojet® 432

UV LED end curing system optionally air- or water-cooled with different performance features

Customizable software according to customer requirements for an efficient data workflow

Mix∞Match

Mix∞match — the smart modular system for the monojet®

By selecting various basic components from print module to software functionality, the Mix∞Match modular system offers endless possibilities for configuring the entire system.

Innovative manual quick cleaning system or fully automatic cleaning

Touchscreen HMI with telescopic arm and keyboard tray can be flexibly and ergonomically mounted to the installation kit or the main machine

Installation kit as mounting base for integration into new or existing machinery

Print mark sensor with different options of detection: product edge, print mark, etc.

High resolution encoder as friction wheel or flange for free placement on the machine

monojet®

the universal UV inkjet solution for numerous applications

- Simply exceptional in terms of print quality, cost-effectiveness, and integration capability, because of its technically well thought-out and very compact concept
- Resolutions up to 1200dpi
- Fields of application: late-stage customization with variable data (text, barcodes, QR and data matrix codes, etc.) and graphic elements (also in spot colors) as well as special features for product and brand protection
- Can be integrated into: packaging lines (e.g. direct printing on folding cartons, blister cards, corrugated, etc.), vacuum belt systems, mailing machinery, label machines, converting and finishing machines and assembly lines with direct printing on a wide variety of products (e.g. plastic components)
- Wide variety of accessories for mechanical and electrical integration into individual customer systems

The system: easy to integrate

It has never been so easy to successfully add the highest UV inkjet quality into automated production systems such as packaging and label printing machines. Unique is that the control system as well as the ink supply system are fully integrated into the print module, saving valuable installation space. And of course, the high-resolution monojet® with 600 dpi and variable drop sizes delivers an excellent print result.

Installation Kit

Thanks to the available installation kit, it is possible to autonomously operate the monojet® autonomously from the base machine, so that even integration in existing machines is easy. Our own high-resolution incremental encoders for precise printing are just as standard as sensors for detecting registration marks, product edges or register perforations for precise printing on already printed and converted materials.
The basic version does not require a protective housing and can therefore be integrated in an extremely compact way due to its versatile various mounting options.
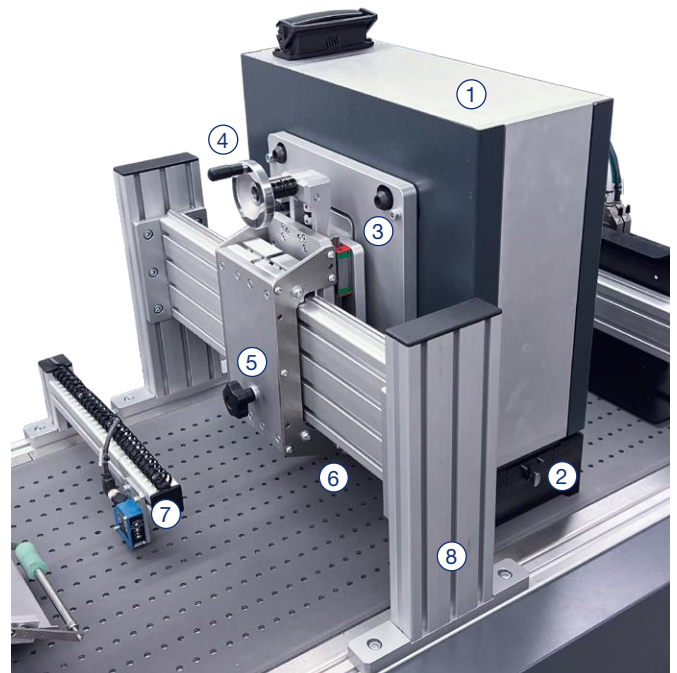
UV-LED pinning and final curing

As a highly universal UV inkjet print unit, the monojet® offers various options for fast and safe pinning and curing of the printed image:

- UV-LED pinning unit, compactly integrated into the monojet® housing

- Powerful, air- or water-cooled UV-LED final curing system for different speeds and depending on the application

If required, the monojet® is also available with water-based inks, which then requires IR, NIR or hot air drying.

① monojet® print engine
② quickcleaning and capping unit
③ mounting system for the monojet® in the installation kit
④ manual height adjustment
⑤ adjustment transverse to the printing direction
⑥ mechanical safety stop
⑦ product sensor for printstart signal
⑧ Customer-specific bracket

monojet® saves space, time, and money

The economic efficiency of the monojet® convinces in every respect! The unique space-saving concept of all models of the monojet® family integrates the control and ink supply completely into the print bar. Only the separate compact housing for the power supply, which includes the interface to the entire system, is required as external component. No other bulky supply units which would take up valuable floor space are required.
The simple mechanical and electrical integration saves a lot of time and reduces costs. To ensure the highest possible machine availability, MPRINT accesses the control system via remote diagnosis whenever required to correct operating errors, reset machine parameters, or refresh operator training.

Innovative quick cleaning system

For safe and fast cleaning of the print head, the monojet® has a manual quick cleaning system. The easy operation minimizes the time required for a cleaning cycle and at the same time prevents potential damage to the print head due to incorrect operation. Easy and quick, the manual cleaning system delivers results matching the performance of automatic systems. The manual cleaning process also eliminates the risk of pinch points, further increasing the safety of the system.
And if there should be the need for an automatic cleaning system after all, it is of course available as an option.
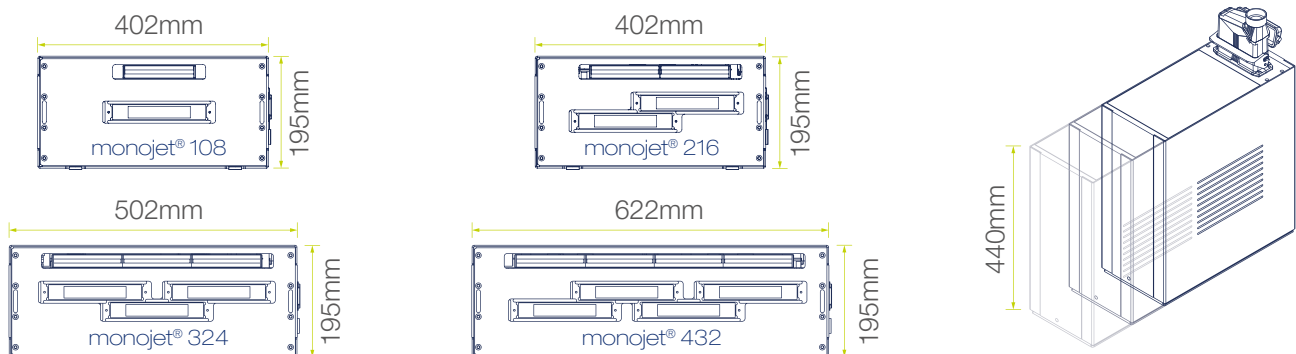

The central control unit

The comprehensive software package of the monojet® controller offers all the functions required for printing data files or flood coating a color. An interface for PDF print data enables the use and integration of different standard software applications.

- Full multipage PDF functionality with the possibility to process up to 2.5 million pages of PDFs consistently
- Integrated RIP functionality with various setting options for processing static elements
- Integrated editor for the design and definition of variable data fields such as barcodes, data matrix and QR codes, number ranges, variable images, texts as well as complex text/number combinations
- Connection to the company network and processing of automatically provided data via TCP/IP interface
- Creation and saving of job templates including all relevant process parameters of the system in a job library
- Customer-specific interfaces can also be provided

monojet®

Technical Data:

Color system:	UV inks (water-based inks on request)
Physical resolution:	600 x 600 dpi (if the print speed is reduced, the resolution can be increased in feed direction)
Print widths:	Standard widths 108 mm, 216 mm, 324 mm, 432 mm (4.25", 8.5", 12.75") Special widths on request in 108 mm (4.25") pitch
Drop sizes:	3, 7, 11, 14 pl
Print speed:	75 m/min (246 ft/min) at maximum resolution (by reducing the resolution, higher speeds can be achieved)
Ink supply:	integrated ink bag or optional external ink supply
Curing/drying:	integrated UV-LED pinning system for initial arrest of ink flow, powerful UV-LED final curing system (air- or water-cooled) Dryer for water-based inks on request
Cleaning:	Innovative quick cleaning incl. sealing unit with integrated ink tray and wipers (automatic cleaning optional)
Printable materials:	Paper, cardboard, film, plastics, folding boxes as well as a variety of other industrial substrates (pre-treatment may be required)
Operation:	User-friendly user interface with touch operation (HMI)
Operator language:	German, English, French (other languages on request)
Software:	own software development, software license incl. all current extensions at the time of ordering included e.g. • Multipage PDF (up to 2.5 million pages) • Batch processing of multiple jobs in queue • Combinations of static image and variable data • Creating various layouts • Generation of variable barcodes from CSV data
File formats:	pdf, tif, bmp, eps
Barcode types:	all common barcode types can be generated in the print software
Interface:	Digital I/O interface to the main machine, additional connection and control via TCP/IP possible

Dimensions::

402mm — 195mm — monojet® 108

402mm — 195mm — monojet® 216

502mm — 195mm — monojet® 324

622mm — 195mm — monojet® 432

440mm

MPRINT

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DIGITAL PRINT
SIMPLE.
INTUITIVE.
POWERFUL.

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