Print and verification, secure and straightforward all-in-one solution

HSA JET® | PHARMA

HSA SYSTEMS A UNIQUE IMPRINT

Are you matching the demands for traceable identification on the outer packaging?

The incidence of falsified, counterfeit or unauthorized medicine in the open market is increasing globally.
By 2016, the EU Falsified Medicines Directive (FMD), incorporating obligatory identification and authenticity features on the outer packaging, will become mandatory.

HSA Systems responds to the challenge with a unique, complete and fully integrated solution, which makes it easy for pharmaceutical manufacturers and contract packers to comply with the FMD.

The HSAJET® pharmaceutical print and verify system provides human machine interface (HMI), printer, vision and controller as well as design, print and verification software in one package.

The control centre manages the complete unit, providing real-time status and logging. The simple graphic user interface ensures seamless shifting between printing and vision.

Built on HP technology, HSAJET® printers provide consistent high quality printing with virtually no maintenance.
The solution is designed with security and ease of use in mind.

"The solution is designed with security and ease of use in mind."

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Manage entire device from one platform

Unlike other systems in the market, the HSAJET® Print & Verification system controls all units from only one interface (HMI).

The system provides

- marking of packaging, including ECC200 Datamatrix codes according to GS1 standard.
- verification and validation of Datamatrix in accordance with ISO 15415 and Object Character Verification (OCV) at a score level of 1-100.
- software in compliance with 21 CFR part 11.

Flexible system

Hardware and software are developed according to international requirements providing

- solutions for both un-folded and folded boxes, blister packs and labels.
- configurable system for in-line and off-line use or for integration with Exmore unit or other print and verification modules.
- software in multiple languages.
- customised GAMP validation pack.
- multiple printheads and cameras.

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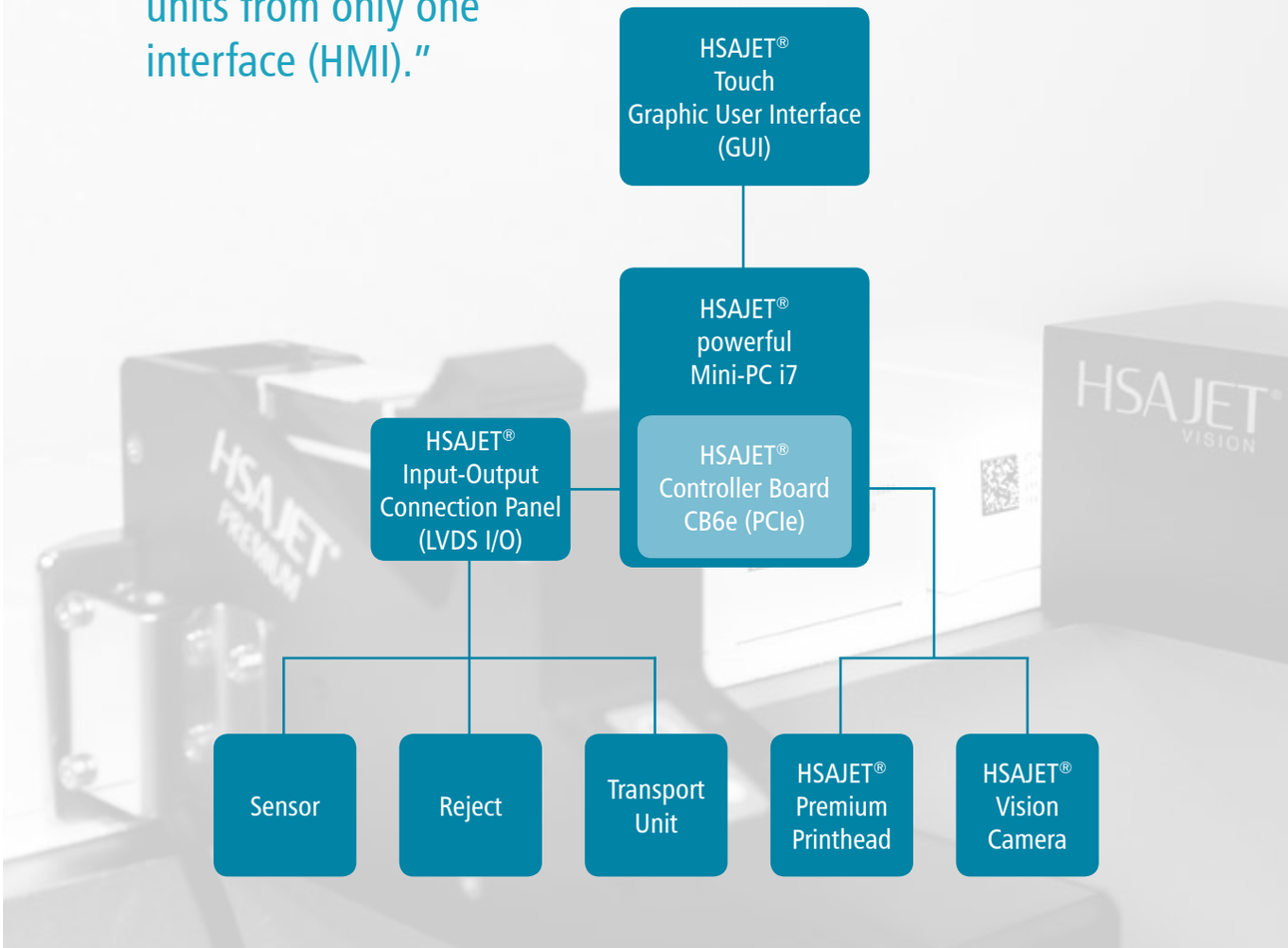

Follow these simple steps to learn what you can achieve by choosing an HSAJET® Print & Verify solution.

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Create Print Job with Unique Software

High Speed Printing at Premium Quality

Verification of printed data

Product Queue Control &
Acceptance or Rejection of Products

Extensive Log

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HSA A UNIQUE IMPRINT SYSTEMS

Create Print Job with Unique Software

Easy and intuitive system operation, with wizard based job creation.

Access Control

The software is protected by a customizable user level access control, preventing unauthorized access. Double password protects sensitive functionalities.

Job Wizard

The wizard provides trouble-free creation of datamatrix codes that follow the GS1 structure. Even complex jobs with multiple application identifiers are easily created. Human readable text is automatically created and positioned on the layout.

Database Connectivity and Remote Controlling

Connection of databases for serialization is an intuitive and trouble-free task. Our XML-based remote controlling protocol provides added flexibility for integration purposes.

Job Selection and Execution

Print jobs are stored in a job library featuring a folder structure and ‘quick search’ function for easy access.
The production monitor features a variety of status information.

Logging

A full print and verification log is created in real time during production. Images of rejected items are being stored for later review if required.

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High Speed Printing at Premium Quality

The combination of HSAJET® Premium printheads and HP thermal inkjet technology TIJ 2.5 provides crisp contrasted images, which meet the demands for pharmaceutical imprints.

Print on wide variety of substrates

With our vast selection of inks available for different substrates, it is possible to create high-quality images on both un-folded and folded boxes, as well as on blister packs and labels.

HSAJET® Premium Printhead

The Premium printhead is made of hard anodised aluminium with a stainless-steel product foot plate. The robust and compact design makes it ideal for use in an industrial environment.

LED low ink signal and reset button on each head

An LED indicator illuminates when ink is low, and the indicator can be reset from the keypad once the cartridge has been replaced.

Quick and easy cartridge replacement

The ink cartridge is easily replaced and held in the correct position without a latch. The printhead's shape prevents damage to the cartridge contact points when installing the cartridge.

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Verification of printed data

The high-speed vision system ensures correct content and quality of imprint.

Vision System

The VS2 vision system has an integrated light source and stray light block. Our development and manufacturing of the system is carried out in accordance with the international standards for verification and quality control of printed data.

Featuring:

- Verification of imprint accomplished by checking content as well as quality of the printed data.
- Datamatrix verification and grading in accordance with ISO 15415.
- Text verification graded with 100 score levels.
- Camera with integrated flash in red and white light.
- Simple setup and calibration.

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Product Queue Control & Acceptance or Rejection of Products

The purpose of queue control and a counter-proof system is to ensure that no products disappear during production, and no defective products are wrongly included among passed products.

The software knows from the job configuration, as well as from the encoder/sensor input on the production line, where a product is supposed to be, and can therefore react if something is not as per normal operation.

The queue control will

- verify the size of the product.
- control the minimum distance between boxes.
- ensure that nothing unsuspected is added.
- ensure that no products are removed during production.
- ensure that approved boxes reach the end of the system.
- ensure that disapproved products are actually rejected.

The print & verify system provides signals and timings for ejecting a failed product.

There is box tracking along the entire machine for both accepted and rejected items.

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Extensive Log

Full Audit Trail

The software features a full audit trail, which is provided for all events.
All data related to the actual printing and verification is logged and time stamped.

- All printed information is provided with quality grade and accepted status.
- Images of all rejected items are stored for later review.
- Creation of jobs, operator intervention and any changes made in the software are logged and time stamped.
- System events, like emergency switch activation and safety doors being opened, are logged and time stamped.

SQL database

The logs are stored using the built-in SQL database for later review or proof. The data can be exported or printed.
Access to all functions is protected by user level control.

Validation Pack

HSA Systems offers a validation pack, which can assist companies in carrying out the validation of the print & verification system.

GAMP Guidelines

The validation pack is a generic series of documents and templates which can be edited to meet specific customer requirements in following the GAMP guidelines.

The validation pack includes Design Qualification with functional specification, Installation Qualification and Operational Qualification with template test schematics.

Reduced work load

Creating the various descriptions and test documents, such as operating procedures and performance tests, is a time-consuming task.

With the validation pack offered by HSA Systems the work-load of validating an addition to the production line is reduced to a minimum.

The validation pack comes with complete parts lists, mechanical and electrical schematics, drawings, part number templates and other documents.

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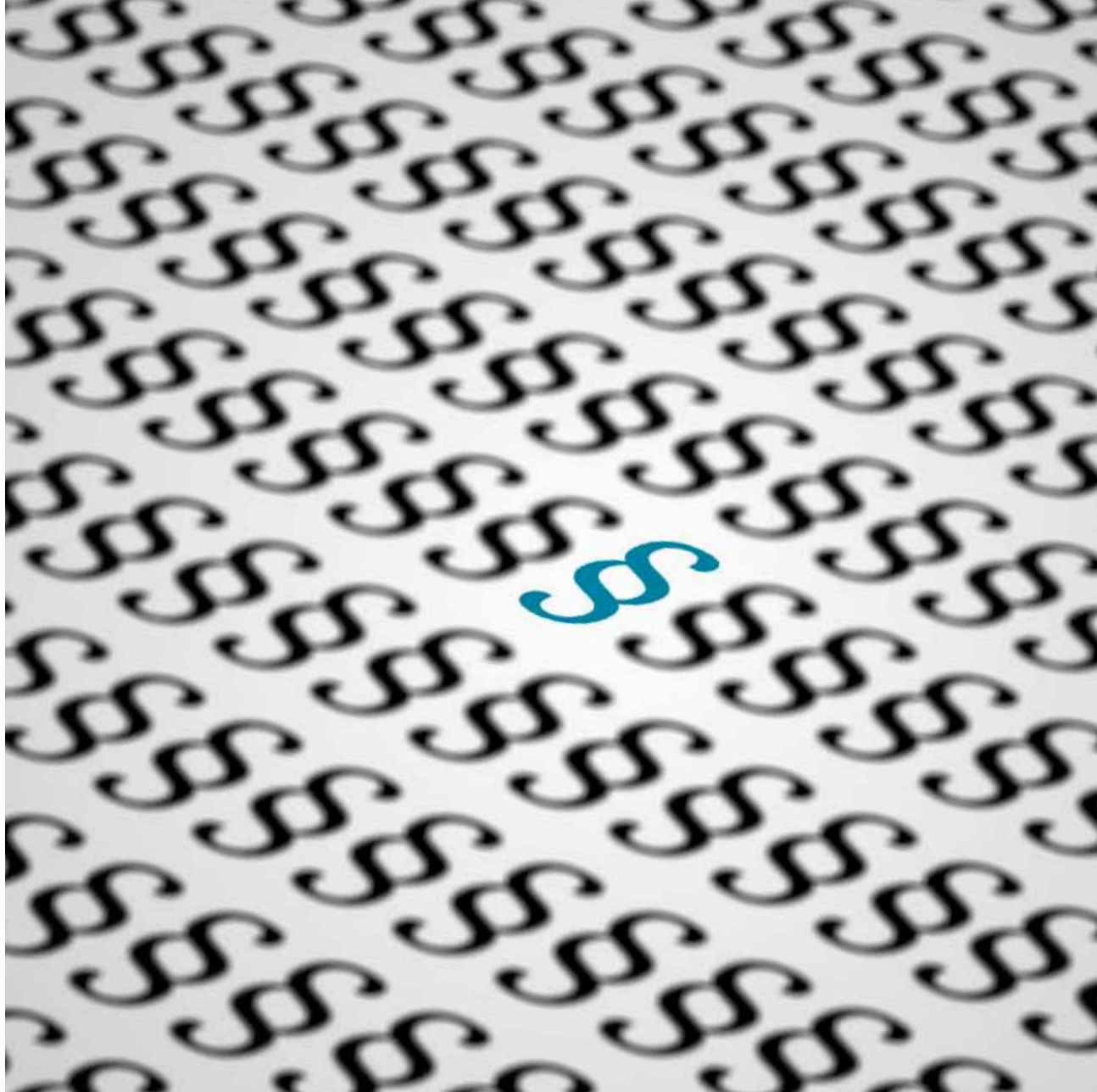

exmore
making industrial standards work

Flexible system for easy integration

The HSAJET® Print and Verification solution is available for both un-folded and folded boxes, blister packs and labels.

The system is configurable for in-line and off-line use or for integration with Exmore unit or other print and verification modules.

Condot

Exmore

HSA

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"...the system is configurable for in-line and off-line use "

Inkjet Technology

HSAJET® K3010 Premium Black Print Cartridge

The Premium black ink is perfect for printing on pharmaceutical boxes

In corporation with Collins Inkjet, we have formulated this ink that has been specially designed to give a premium print performance on pharmaceutical boxes.

The Premium black produces a high quality image that qualifies for camera verification. It dries well on coated and regular substrates, provides a clear, dark image and requires very little maintenance.

The K3010 is a water-based ink with long decap time and with very good rub and oil rub durability.

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HP 45si Black 2580 Solvent Print Cartridge

Inkjet Technology

Designed for track-and-trace coding and marking

For package coding production facilities using coated, foil-lidded substrates, HP 2580 ink provides durable coding and marking. It also delivers fast dry times without heat assistance. Boost production efficiency – print and stack smear-resistant prints, required for production handling.

Maintain high productivity

HP 2580 ink offers a long decap for solvent TIJ ink. The long decap time enables production efficiency because you can stop and restart your production line without having to maintain the print cartridge.

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References

HSA Systems has provided printing and marking solutions to a vast number of small, medium and large size companies.
For confidentiality reasons, many pharmaceutical companies do not allow others to use their name and logo.
At HSA Systems, we respect and take very seriously the confidentiality between us and our customers. Therefore we only publish the references from companies who have explicitly agreed to be a part of this material.
If you wish to learn more about installations on specific applications, please contact us.

B. Braun

With a history that goes back 175 years, B. Braun is today one of the world's leading suppliers of healthcare solutions. Represented in 60 countries worldwide, B. Braun specialises in the design, production and promotion of medical and surgical equipment as well as pharmaceutical products and services.
HSA Systems has provided print and marking solutions to several of B. Braun's factories worldwide. In France, where the group has five production sites and three branches, HSA Systems has provided an HSAJET® TIPC-HP system for the printing of ECC200 Datamatrix codes according to GS1 standard to ensure track and trace of high-technology medical and surgical supplies.

Unichem

Unichem Laboratories is one of India's most respected pharmaceutical companies. Unichem's headquarters are located in Mumbai and they have six drug manufacturing locations across the country.
HSA Systems has supplied several printing systems to Unichem Laboratories, e.g. the Baddi plant, which is recognized as a world-class facility and is equipped with pharmaceutical manufacturing technology. This plant has, among other things, obtained regulatory approvals by WHO, MCC (Medicines Control Council) and MHRA (Medicines & Healthcare Products Regulatory Agency). In this plant, two HSAJET® validation systems were installed on the production lines for manufacturing tablets, capsules, dry syrup and vials in 2013.
In the Goa plant, which has consistently met Current Good Manufacturing Practices (cGMP) guidelines and WHO specifications, two HSAJET® printing systems have been installed.

Laboratoires Élerté

Elerté is a relatively small but world-known independent pharmaceutical laboratory situated in Aubervilliers in France. The company is developing and researching high-quality and innovative medicine and health products.
On each production line, Élerté has installed an HSAJET® TIPC-HP printing system for direct printing of ECC200 Datamatrix codes according to GS1 standards on folded boxes.
The HSA technology gives the quality manager the possibility to prepare the print job, and it provides a complete work sheet and an automatic update of printing data to the operator.

Inkjet Technology

CollinsInkjet
Inkjet Innovations for Industrial Applications

GENERAL

IMTECH

XAAR®

Streamfeeder®

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HSA Systems is a leading manufacturer of industrial inkjet equipment. We were founded in Denmark in 1993 and our core business is developing and manufacturing high resolution inkjet printers, as well as a range of other products for coding, marking and commercial printing applications.

Technology

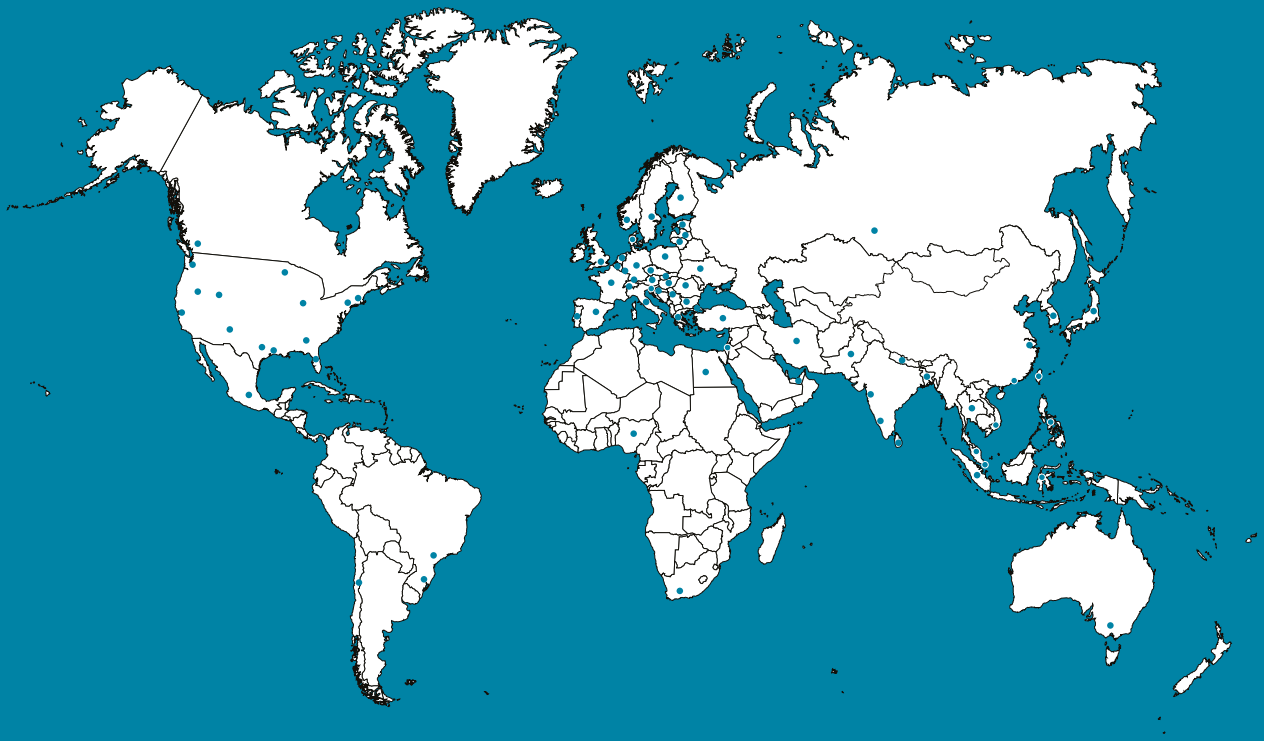
Today, we are Hewlett-Packard's largest independent industrial printing technology partner in Europe. In addition to HP thermal inkjet, we offer a wide range of Xaar-based printheads and an extensive range of accessories for the coding/marking and commercial printing industries.

Service & Support

Service and support is provided through technicians and support staff who have all been specially trained on the HSA Systems equipment. HSA Systems appreciate the demand for fast back-up; this is why the factory is always available for extended support.

Global Network

Our equipment is available through a global network of distributors and integrators.
Thanks to these partners, HSA Systems is supplying stand-alone systems and integration kits to companies around the globe.



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