

# PRINT- & VERIFICATION SOLUTIONS FOR THE PHARMA INDUSTRY

'ALL-IN-ONE':  
PRINTER - CONTROLLER - SOFTWARE - CAMERA

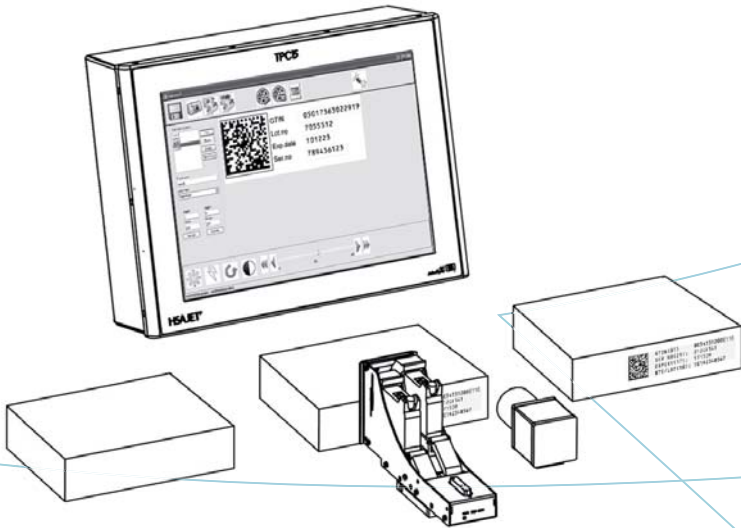


Inkjet  
Technology by   
invent

GAMP  
21 CFR part 11  
e-Pedigree  
LOG  
Datamatrix GS1  
OCR-B  
Shift Codes  
Database-connection



**HSA** A UNIQUE IMPRINT  
SYSTEMS



## HSA Systems introduces a new "All-in-one" printing and verification system:

The system is especially adapted for the pharmaceutical industry.

All functionalities are integrated in a central controller unit (TPC15).

The TPC15 handles all tasks, from creating and printing of messages, to verification of barcodes and OCR with camera, as well as diverting rejected products.

### Control via Network (Fig. 1)

The central controlling unit is based upon a PC platform running embedded Windows.

A 15" touch monitor with intuitive icon based user interface makes it easy to choose the right function.

Local area network (LAN / Ethernet): Databases can be connected or downloaded to the HSA Systems Pharmaceutical printing system via LAN.

The TPC15 has an implemented Ethernet (LAN) protocol which remotely provides access to most of the printer's functions. This means that is possible, for example, to read the log file with shift-codes, the number of prints, download jobs etc.

### Integrated Printer Controller unit

The TPC15 has an integrated printer controller, from this, up to 4 HP pens (2") can be controlled. The encoder and product sensor are connected directly to the TPC15.

The TPC15 provides trigger signals to both camera and diverter why only one product sensor is required.

Input and output "Handshake" signals for communicating with external controlling devices, such as PLC's, are build in.

The TPC15 is also available for panel mount and provides an IP65 rating.

### Touch Interface (Fig. 2)

The system can be based upon industrial touch interface brands other than the HSA Systems TPC15, for example B&R or Siemens. If another brand is chosen, the system requires an external printer controller (M-HP8) as shown in the diagram.

With the external printer controller the system can print with up to 8 HP pens (4")

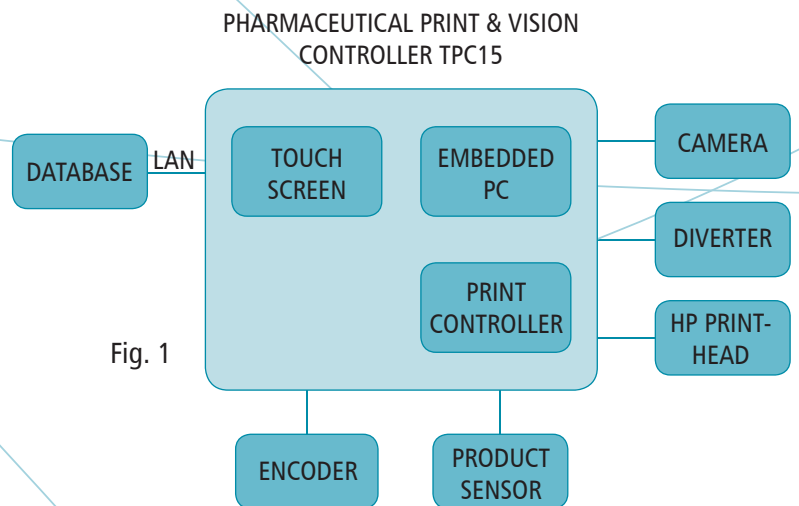


Fig. 1

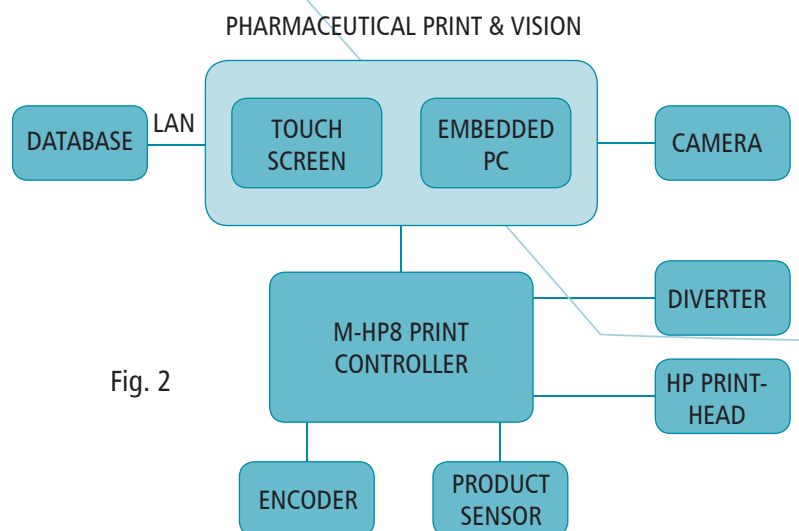


Fig. 2

## Pharmaceutical printing solution is controlled via touch interface

Intuitive icon-based touch interface makes it easy-to-use.

## Industrial casing

The black anodised aluminium frame and the steel casing of the controller provides extra protection when used in harsh environments.

## Print heads

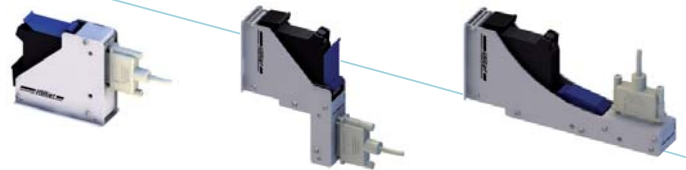
The TIPC15 touch controller can control up to 2" of print height.

The availability of different print head styles makes the system usable in a variety of applications printing horizontally or vertically down.

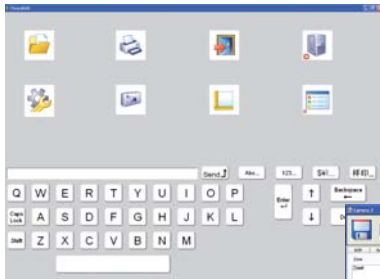
## Software / Logiciel

The Pharma INKdraw software is specially developed for use in the pharmaceutical industry.

Easy setup of print jobs including Datamatrix codes according to GS1 standard.

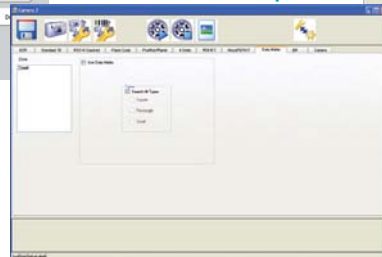


## Touch Screen Menu



Main Menu: From here you e.g. select a file for print or activate the camera software.

## Datamatrix Setup



From this menu settings for reading Datamatrix codes are chosen.

## Zone Marking



The touch interface from where variety of different barcodes and text can be marked for reading.

## OCR Setup



Setup menu for text reading. Choose the language of the text or set it up with language specific characters.

## Camera

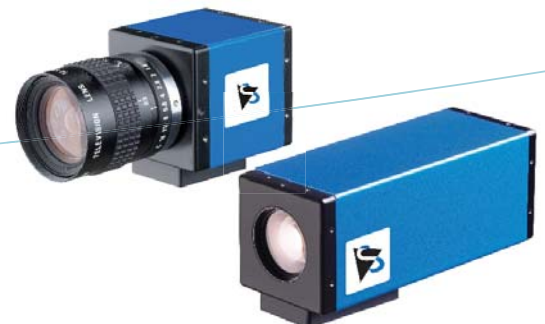
HSA Systems utilizes as standard cameras from Imaging Source.

Imaging Source provides cameras with different resolutions 640x480, 1024x768, 1280x960.

You can choose communicating either via USB or Firewire.

Imaging Source cameras can be delivered with automatic motorized zoom.

The controlling is carried out via touch interface. Via USB or Firewire the software sends the necessary signals to the camera.



## Inks for the Pharmaceutical Industry

A demand from the pharmaceutical industry for printing on different substrates requires a wide selection of inks. HSA Systems offers a range of inks each performing optimally on specific substrates used within the pharmaceutical industry.

Primarily we use inks from HP, but on the other hand we have a close cooperation with HP approved ink-manufacturers like Collins Ink. Our feedback to these manufacturers is part of the decision-making for improvements, or for the development of new inks for specific industries.



## HP TIJ 2.5 KEY FEATURES

- Cost-effective: no warm-up cycle and no down time
- Easy to use: No special training required to operate and maintain thermal inkjet printers
- Fast: Hundreds of tiny nozzles firing at high frequency allows high-quality printing at high speeds
- Reliable: TIJ is less sensitive to air bubbles in the firing chamber than other printing technologies, avoiding print quality problems and delays caused by trapped air
- Flexible: Supports a wide variety of media
- High quality: TIJ places smaller drops more accurately, producing consistently superb image and text quality
- Environmentally safe: With thermal inkjet, there is no need for service technicians qualified to handle volatile solvents, and no noxious fumes
- Lower cost of ownership: A thermal inkjet printer can cost much less than other printing equipment, reducing the market entry cost

## HSA SYSTEMS

### Global Network

The equipment is available through our own offices or a network of distributors and integrators. Thanks to these partners, HSA Systems is now supplying stand alone systems and integration kits to companies around the globe.

### 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 available always for extended support.

DEALER:



HSA Systems Denmark  
DK-2740 SKOVLUNDE | +45 4494 0222 || DK-5260 ODENSE S | +45 6610 3401

HSA Systems France  
F-93160 NOISY-LE-GRAND | +33 1 48 15 50 50  
[www.hsasystems.com](http://www.hsasystems.com) | [mail@hsasystems.com](mailto:mail@hsasystems.com)