

EvoPrint

The industrial printing system

EvoPrint



Key Features

- Printing during positive or negative acceleration
- Active velocity compensation (No rupture or warp of print image)
- Direction detection (positiv, negativ)
- Software-/Firmware update in-field via LAN
- 4 × HP Inkjet Technology

Possible use-cases

- Packaging industry
- Wood-processing industry
- Special engineering
- Pharmaceutical industry
- Palletizing and conveying industry
- Mechanical engineering

Our future-oriented product-range allows a very easy integration into existing processes. This includes for example digital and analogue IO modules, hydraulic valve controls, drive technology, PLC and scalable industrial PCs with integrated fieldbus interfaces.

The request

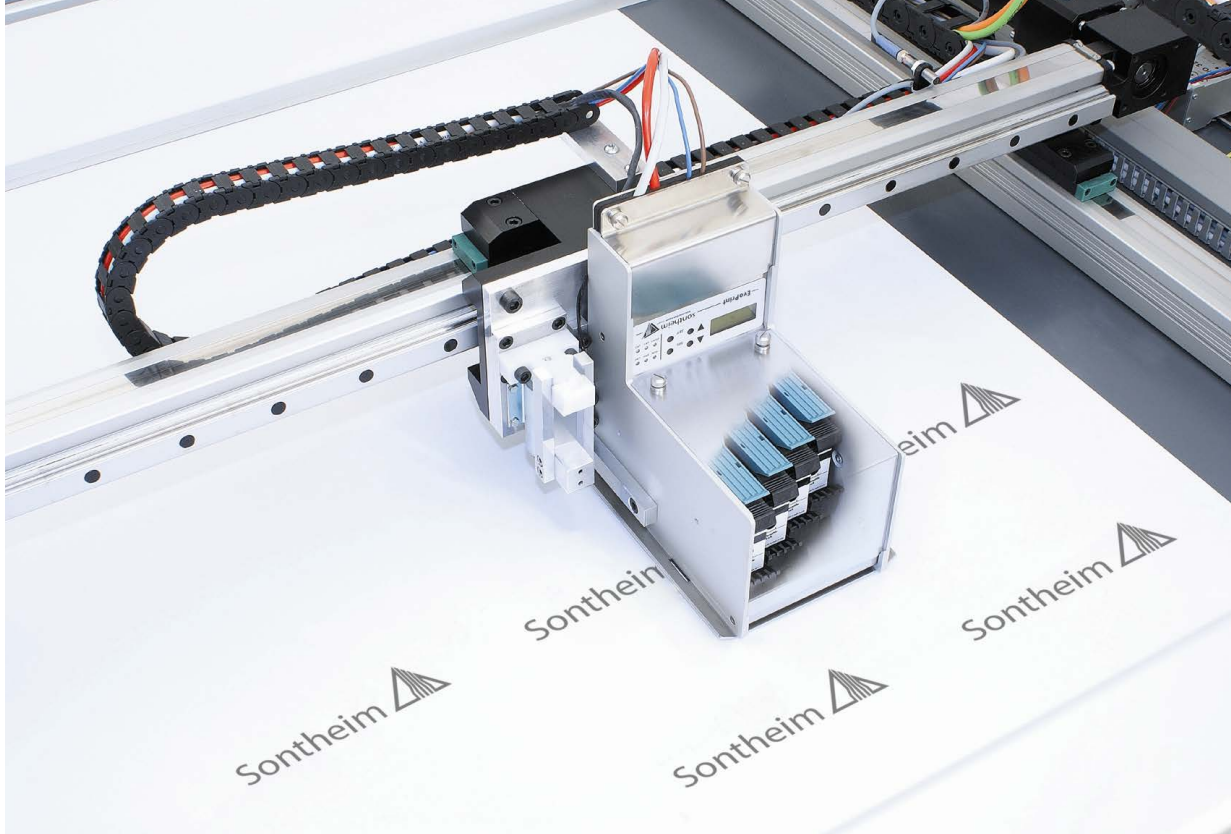
You want to have an industrial printing system which can be integrated into your production lines very fast, easily and completely? You need professional print results, regardless of the materials and printing speed used?

The situation

Most providers of HP Inkjet Technology printing systems are offering solutions, which can hardly be integrated into existing processes. They often need separate space between two steps and additional time for the printing. Moreover, there are only few possibilities to integrate controls and the user interface into existing control systems. Common systems are sold with an extra PC-based interface – which requires room, money and specially trained operators!

The Elegant Solution

The Elegant SolutionEvoPrint provides seamless integration of an industrial printing system into an existing machine without any change to the production line – at a maximum printing speed of up to 180 m/min resp. 3m/s at 300 dpi resolution. It is considerably faster than other printing systems and can also be used while accelerating. Furthermore, active velocity compensation avoids rupture and warp, while the direction detection eliminates double printing. You will save process time and material costs! EvoPrint offers software tools, which can be fully integrated into existing customer interfaces without the need for an extra PC-based interface in the machine. The printing system itself is connected by standard LAN/Ethernet for image transfer. The control can be done by fieldbus like EtherCAT or CAN as well as LAN or incremental encoders.



Sample application:
EvoPrint in motion.
Assembled at a
moving axis on a xy-
plottertable.

Application Areas

EvoPrint is tested and field approved by different applications. Due to the close cooperation with our customers in combination with outstanding know-how as a system integrator, we provide individually tailored system solutions for various branches of industry:

Wide area of expandabilities

- Performance resources even at complex applications
- 32 bit microprocessor with 200 MHz
- 64 MB RAM and 32 MB Flash on board

Customizable applications

- No change of production line
- Assembly at static or moving axes
- Printing of text, 1D & 2D barcodes and images

Highest quality

- 300 dpi at a printing speed of 180m/min
- Active velocity compensation
- Course detection
- Based on HP Inkjet Technology

Future-proof due to innovative technology

- EtherCAT and CAN, standard-ethernet and incremental encoder
- Software tools for integration into existing application software



Functional design meets comfortable handling, which allows an easy change of cartridges



EvoPrint	Technical data
Dimensions (W × H × D)	114 mm × 218 mm × 187 mm
IP class	IP52
Power supply	30V DC (± 5 %)
Weight	approx. 3,3 kg
Humidity while printing	10 % – 80 %
Storage humidity	10 % – 80 %
Temperature while printing	+10 °C – +40 °C
Storage temperature	+10 °C – +30 °C
Interfaces	1 × RJ45 LAN 100 MBit IEEE 802.3, 2 × RJ45 (EtherCAT or CAN), 2 × incremental (encoder) interface (SubD 9), 1 × power supply 9-pole Phönix, 4 × digital outputs (Ub -0,5 V), 1 × RS232 (SubD 9)
Buttons, LEDs	4 buttons for menu, 6 × Status-LEDs for EtherCAT/CAN and LAN
LCD	LCD-Display with 2 × 8 characters for system status, error code and filling level alarm
Speed	Maximum speed of 180 m/min at 300 dpi resolution
Distance to medium	< 2 mm
Printing height	max. 5 cm in one printing line
CPU	– Powerful 32 Bit µc with 200 MHz – Quick FPGA for controlling cartridges
Memory	– 32 MB Flash, 64 MB RAM on board
Features	– Printing while accelerating or decelerating – Active velocity compensation (no stretching or rupture of image) – Direction monitoring (positive, negative) – Software / firmware update via LAN – Protected against dust
Assembly	Static or flexible at moving axes
Number of cartridges	4 × HP Inkjet Technology
Supported cartridges	C8842A Versatile Black, Q2344A SPS1918 DYE Black C6168A, C6169A, C6170A and C6173A Spot Color (red, green, blue and yellow) VP90-E (UV-curing), others on inquiry
Average drop size	26 – 29 pl (depending on ink)
Bulk system management	Ink supply via bulk canisters for continuous printing
Cartridge management	Cartridge calibration (pre-warming, spitting, pulse amplitude, voltage)
Software	– Different software tools for configuration and integration in existing applications – Programmable 32 Bit API (DLL)

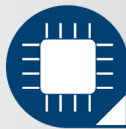
We live electronics!
Wir leben Elektronik!



Engineering



Fieldbus



Hardware-
Development



Software-
Development



Diagnostics



Automation



Automotive



Production



Service

We are looking forward to your enquiry. For a personal advice and detailed information please refer to our specialists:

DE Sontheim Industrie Elektronik GmbH
Georg-Krug-Str. 2, 87437 Kempten
Tel: +49 831 575 900 -0 – Fax: -73
info@s-i-e.de

US Sontheim Electronic Systems L. P.
201 West 2nd Street, Suite 710
Davenport, Iowa 52801
Phone: (+1) 563 676 0260

We live electronics!
www.sontheim-industrie-elektronik.de