EvoPrint®

The industrial printing system

EvoPrint®

Our future-oriented product portfolio allows the integration of the EvoPrint® printing system into existing processes without any difficulties. This includes digital and analog IO modules, hydraulic valve controls, drive technologies, PLCs and scalable industrial PCs with integrated fieldbus interfaces.

Key Features

Printing during positive or negative acceleration

Active speed compensation

Software and firmware updates in the field via LAN

HP Inkjet Technology

Robust aluminium housing

The request

Are you looking for an industrial printing system that can be quickly, easily and fully integrated into your production processes? Do you want professional printing results, regardless of the materials used and the printing speed?

The situation

Most suppliers of HP Inkjet Technology printing systems are offering solutions, that are extremely difficult to integrate into existing production processes. They often require a 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!

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

The elegant solution

EvoPrint® provides seamless integration of an industrial printing system into an existing machine without changing the production line. With a maximum print speed of up to 180 m/min or 3 m/s at 300 dpi resolution, EvoPrint® is thus considerably faster than conventional printing systems. Even during acceleration, precise printing is still possible. Furthermore, active speed 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.

Application areas

EvoPrint® is tested and approved in practice. Due to the close cooperation with our customers in combination with our 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
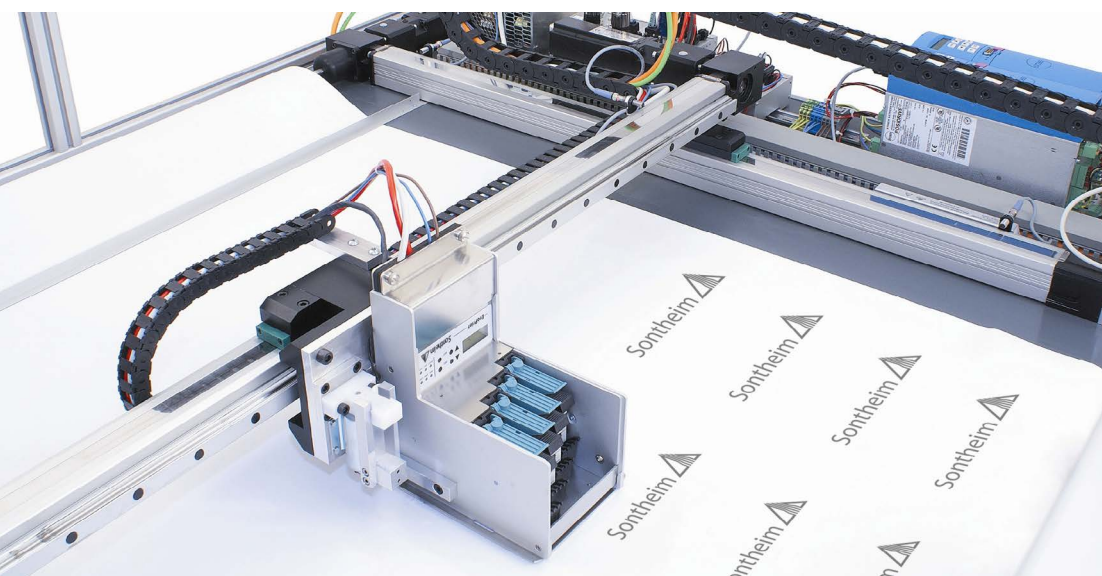- Printing of text, 1D & 2D barcodes and images

Highest quality

- 300 dpi at a printing speed of 180 m/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

Technical Data

CPU	Powerful 32-bit microcontroller with 200 MHz clock frequency Fast FPGA to control the cartridges
Storage	32 MB Flash, 64 MB RAM on board
Connections	1× RJ45 LAN 100 Mbit IEEE 802.3 2× RJ45 (EtherCAT or CAN), 2× Incremental (Encoder) Interface (D-Sub9) 1× Supply voltage 9-pole phoenix 4× Digital outputs (Ub −0,5 V) 1× RS232 (D-Sub9)
Control panel/membrane keyboard	4 navigation keys for menu operation, 6× status LEDs for EtherCAT/CAN and LAN
LCD	LCD display with 2× 8 characters for device status, error code display, filling level alarm
Speed	Maximum print speed up to 180 m/min at 300 dpi resolution
Print distance	< 2 mm
Print height	max. 5 cm in one print process
Installation options	Static or 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 request
Average droplet size	26–29 pl (depending on the ink used)
Bulk system management	Supply via 1 of 2 bulk tanks for continuous printing of large jobs
Cartridge management	Cartridge calibration (pre-warming, spitting, pulse width, voltage)
Software	Various software tools for configuration and integration into existing applications Easily programmable 32-bit API (DLL)
Features	Printing during positive or negative acceleration Active speed compensation (no warping or tearing of the printed image!) Direction detection (positive, negative) Software/Firmware Update in the field via LAN Dust protected
Dimensions (l×w×h)	187 mm × 114 mm × 218 mm
Protection class housing	IP52
Weight	approx. 3,3 kg
Rel. humidity during printing	10 % – 80 % non-condensing
Rel. storage humidity	10 % – 80 % non-condensing
Operating temperature during printing	+10 °C up to +40 °C
Storage temperature	+10 °C up to +30 °C
Power supply	30 V DC (±5 %)

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

Mobile Automation

Industrial Automation

Diagnostics

Connectivity

We are looking forward to your enquiry!

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