

FUNCTIONAL PRINTING

PRINTING OF CONDUCTIVE AND FUNCTIONAL MATERIALS



printing electrodes

Application

biosensors printed electrodes
modification of surface properties
product codes/graphics

PRINTABLE MATERIALS

- conductive materials (silver, gold, platinum)
- functional materials (Al_2O_3 , fluorophores)
- graphical printing

SUITABLE TECHNOLOGIES

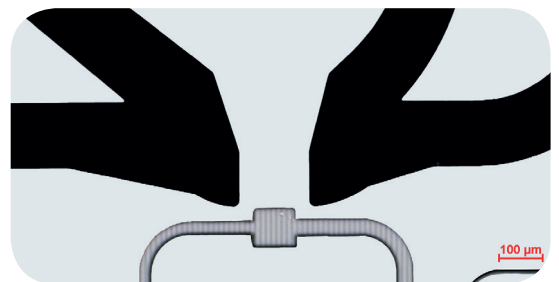
- inkjet (contact-free, lines & spaces $>5 \mu\text{m}$)
- offset printing
- screen printing
- micro dispensing

PRINTING PROCESS

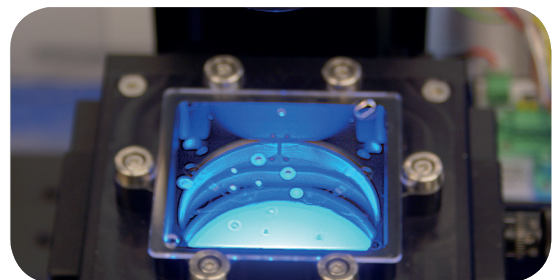
- **modification of surface properties**
plasma treatment, coatings, microstructured surfaces
- **modification of printing materials**
choice of organic solvents, adjustment of solid content or viscosity and surface tension
- **drying and sintering**
thermal, UV/IR
- **inline vision inspection systems**

YOUR BENEFITS

- wide range of printable materials
- different printing/deposition techniques depending on application
- form resistant and edge definition
- perfect alignment to other functional structures
- customized solutions from prototyping to high volume production
- in-line QC with vision inspection systems
- cleanroom conditions



high edge definition and perfect alignment to other functional structures



vision inspection system