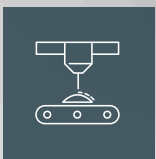
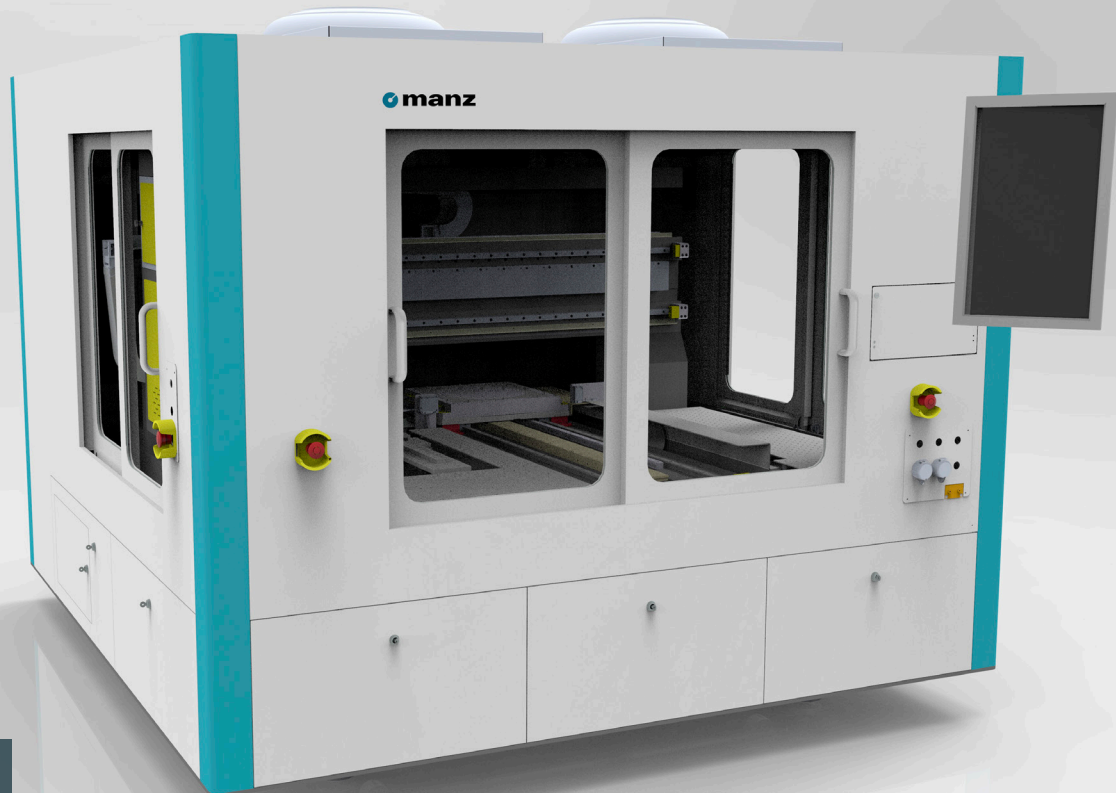


ENGINEERING  
TOMORROW'S  
PRODUCTION



# Manz Digital Printer SDC100

Apply for semiconductor production solutions

# Technical Specifications

## SDC100

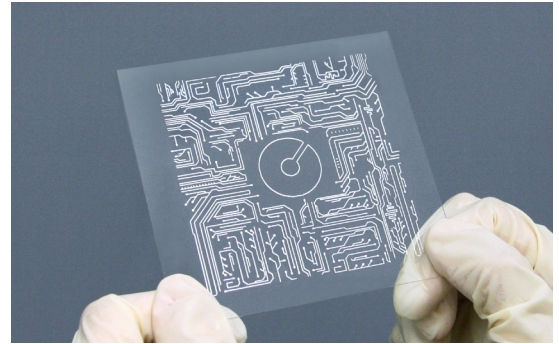
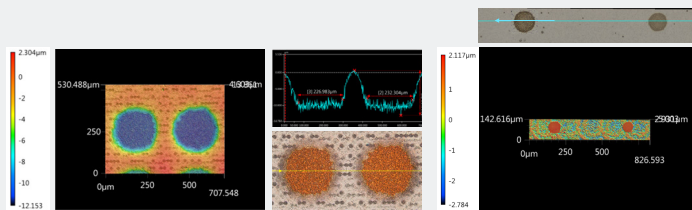
<b>Max. Substrate Size</b>	350 mm x 350 mm (adopt 12" wafer or smaller)
<b>Footprint (W x D x H)</b>	2.5 m x 2.5 m x 1.9 m
<b>Weight</b>	4,300 kg
<b>Substrate clamping</b>	Vacuum
<b>Base Frame</b>	Granite
<b>Stage</b>	<b>Accuracy</b> $\pm 1 \mu\text{m}$ <b>Precision</b> $\pm 0.5 \mu\text{m}$
<b>Print speed</b>	800 mm / sec
<b>Available Printheads</b>	Konica Minolta / Epson / Fujifilm / Xaar / Ricoh / Kyocera / Toshiba *note: 1 upto 3 printheads integration available.
<b>Vision system (option)</b>	<ul style="list-style-type: none"> <li>• Drop watch for droplet path, drop volume and speed evaluation.</li> <li>• CCD for position detection, printed image view, pattern inspection.</li> <li>• UV light as ink curing module.</li> </ul>
<b>Applicable Substrate material</b>	PET / Glass / Wafer / PI / LCP With min. thickness 0.3 mm , Max thickness 20 mm.
<b>Available Functional ink</b>	Solvent / Water / UV
<b>Viscosity range</b>	10~20 m Pa · Sec

## Note

(1) Chart of applications and corresponded ink type.

APPLICATIONS	INK TYPE
<b>Electronics</b> Conductive layer, Dielectrics layer	Ag / Cu conductive ink
<b>Resists</b> Etching resist, Plating resist, Solder resist	UV type black / green resist ink
<b>Optics</b> Black Matrix, Anti-reflection, Anti-scratch	UV / solvent type black ink

(2) Solder mask for patterned coverage on copper redistribution layers.  
Target clearance diameter is  $230 \mu\text{m}$  & diameter accuracy  $\pm 4 \mu\text{m}$



## Features

- Offers versatile functional printing for customization applications. (1)
- Ensures precise printing with good dot and space definition in the  $XY$  direction, achieving a drop accuracy of  $\pm 10 \mu\text{m}$  @ 3 sigma. (2)
- Features a user-friendly GUI supporting \*.TIFF and DXF file formats with a maximum printing resolution of 5400 dpi.
- Enables high-speed printing at 800 mm/sec, and offers multiple printheads with interlaced nozzles to achieve higher resolution and throughput.
- Features a stable granite structure with a CDA antivibration system for damping.
- Precision mechanical design with self-calibration, including nozzle calibration.
- HEPA assembly prevents dust and contamination in compliance with class 100~1000 regulations, tailored for semiconductor manufacturing.
- Additive processes enhance production efficiency and sustainability.
- Upon request, add-on modules such as UV light, dropwatch, and CCD can be included.