



Printing Cycle

1. Purpose

- 1.1. Companies interested in digital conductive printing sometimes require initial testing and experimenting before adopting a full printing solution.
- 1.2. A printing cycle is meant to enable such companies and customers an affordable way to test digital conductive printing easily and efficiently.

2. Printing information provided by the customer

- 2.1. Goal of the printing cycle
- 2.2. Application
- 2.3. Pattern file (Gerber or similar), clearly including the dimensions of the patterns to print.
- 2.4. Electrical properties: resistivity and specifically the required resistance (between two defined points).
- 2.5. Substrate properties - data sheet.
 - 2.5.1. Notice: for polymer substrates the Tg should be $\geq 130^{\circ}\text{C}$ (special cases may be considered for different sintering processes, not thermal sintering).
 - 2.5.2. Additional substrates possible, examples: Glass, FR4, etc. (Teflon® and PVC are not compatible).
- 2.6. Substrate for printing: if the substrate is special, the customer is required to provide it.
- 2.7. Maximum heating temperature of the substrate / process / product.
- 2.8. List of tests to be performed following the printing (provide target values and test method).
- 2.9. Post processes: is there any process that the part needs to go through after the printing & sintering?
- 2.10. Highly recommended that the customer also sends working samples (manufactured in alternative methods) with data sheet (if available).

3. Number of printed samples

- 3.1. Number of sheets: 5.
- 3.2. Maximum number of designs per sheet: 5

4. Results & Report

- 4.1. Process overview (description, substrate cleaning, printing performed, sintering conditions)
- 4.2. Images of the printed samples.
- 4.3. Results table including: type of substrate, printed thickness, measured dimensions, sintering conditions, electrical properties and adhesion test results.
- 4.4. Summary