ColorGATE offers as exclusive solutions partner of n-art-m the new PrintProcessLab (PPL). PPL is a testing and simulation system to simplify and fasten the process development in digital industrial inkjet printing. It allows to perform detailed print head and ink compatibility tests and enables genuine. With PPL functions of digital printing systems such as continuous operation, different jetting distances regarding the substrate and the overall printing speed can be proved and examined.

Highlights
- Direct access to a complete writing system
- Comprehensive ink and substrate compatibility testing
- Suitable for various inks, print heads and media types
- Analysis of process requirements close to reality conditions
- Monitoring of
  - Print head properties
  - Print head temperature
  - Ink debris at print head
- Determination of optimal print condition
  - Continuous operation tests
  - Nozzle checks
  - Sample prints
- High flexibility, modular expandable

Test and simulation scenarios
- Optimal printing temperature per substrate
- Optimal media surface temperature
- Optimal jetting distance, drying times and properties
- Adhesion properties of substrates

Further information about PrintProcessLab can be found on our website.

Do you have further questions, or are you interested? Just use our contact form.
Overview of all components

PrintProcessLab (PPL) is of a modular design in order to be flexibly expandable.

**PPL Cleaning Station**
For a simple cleaning of the print heads and simulation of cleaning cycles in the final printing system. 
*Only required once per PrintProcessLab.*

**PPL Home Station**
To protect the print heads against dry out of the inks.  
*Only required once per PrintProcessLab.*

**PPL Purge Station**
For purging of the print heads.  
*Only required once per PrintProcessLab.*

**PPL Endless Surface**
Continuous operation tests without substrates. Determination of data from continuous operation, such as temperature, optimal printing speed and similar.  
Through changing PPL Endless Surface for simulation of continuous operation and PPL Adhesive Surface for nozzle check, the whole process can be reviewed as long-term test.

**PPL Adhesive Surface**
Fixation of media two and three dimensional by simply laying on the all-purpose adhesive mat (media thickness up to 20 mm). Functions for sample prints and nozzle check.

**PPL Base Station Inkjet-Cassette 50**
Connects up to 4 Inkjet-Cassetts 50 with PrintProcessLab.  

**PPL Docking Station Inkjet-Cassette 100**
Connects one Inkjet-Cassette 100 with PrintProcessLab.  
*Only required once per PrintProcessLab.*

**Inkjet-Cassette 50**
Complete printing system incl. print head Ricoh MH5420/MH5440 (Gen 5).

**Inkjet-Cassette 100**
Complete printing system incl. print head Kyocera K34A/K34B.

**PPL Stand**
PPL Stand is for deployment of PrintProcessLab at perfect working height.

**PPL LabOS Software**
PPL LabOS Software is the user interface for the PPL unit.