



MEYER BURGER

●●● PiXDRO IP410

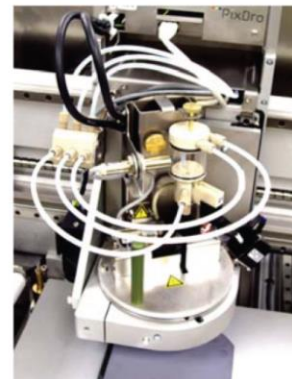
Advanced industrial printer

Revolutionary inkjet printing technology

- Capable for printing **aqueous-, solvent-, hotmelt- and UV based inks**
- Maintenance functions; jetting, vacuum capping, print head purge, wiping and nozzle inspection
- **Automatic compensation for substrate deformation**, based non-linear scaling using fiducial alignment
- Substrate carrier with vacuum clamp, integrated heating/cooling possible and lifting pins option
- **Different, tunable, control levels in HMI** for operator-, maintenance- and process control
- **Advanced print strategy software**, PrintGen
- **Integrated vision system** for process control
- SECS/GEM interface for integration with factory production monitoring and logging systems
- **Single-pass, multi-pass and multi-directional printing**
- Closed, controlled, conditioned environment

Options

- Automatic ink feed and solvent flush system, on request with ink de-gassing unit
- Robot handling integration
- Laser integration
- UV pinning
- Jetting station, enabling fast swap between active print heads and extending print head lifetime
- Integration into automated process sequence



Technology powered by



ROTH & RAU
CELL & COATING SYSTEMS

System Description

The IP410 is an advanced industrial printer, build for use in the production of PV (CIGS, O-PV, Si wafer based) PCB (classical & multi-layer, 3D), Semicon (sensors, power devices, (bio)MEMS), OLED (lighting, display, 3D), Touchscreen and Printed Electronics. One of its main strengths is printing with high precision in multi-layer applications as a result of the vision-positioning-print-check loop. The IP410 can print in X, Y and XY direction, and is capable of rotating its head assembly. Due to modularity, a customer is always able to customize this platform to its specific needs. The IP410 platform supports various print head types and laser modules. Functionalities are printing, cleaning and repairing. The IP410 platform opens up possibilities and opportunities never seen before; it can be modulated into the perfect tool to support advanced R&D or as a fully automated (pilot) production tool.



Data sheet PiXDRO IP410

Equipment		
Substrate	- Table	415 x 530 mm
	- Conditioning	50°C standard and 90°C optional
	- Clamping	Vacuum clamping
System	- Accuracy	< 5µm 3 sigma repeatability
	- Footprint	Approx. 1720 x 1080 x 1990 mm
	- Weight	Approx. 825 Kg
	- Power input	Single phase, 100-240 VAC, ± 2000 W, 50/60 Hz
4 axis motion		x, y, z, phi print head
Exhaust utilities		35 - 750 m³/hr at 200 Pa backpressure
Head exchange time		< 3 minutes
Vision systems		Standard Dropview and Printview, optional Advanced Drop Analysis
Maintenance functions		Jetting, vacuum capping, print head purge and wiping

Software		
Advanced drop analysis	Calculation of drop volume, speed and angle	
	Influence nozzle usage and printing sequence	
	Free programmable recipes	
	Over 120 file formats possible	

Inkjet specifications		
Available print heads	Spectra, Konica Minolta, Trident, Xaar	
	Solvent based (incl. nanoparticles, silver), water based (incl. KOH), acidic, hotmelt, UV curable	
Viscosity range		1 - 20 Centipoise
Nozzle range		1 - 1000 nozzles
Drop volume range		4 - 200 pico liter
Feature sizes		Down to 5 - 20 µm
Printing speed		X-axis, 200 mm/s, 500 mm/s

Technical data are subject to change / 09-2013