PiXDRO JETx

Inkjet Printer for Mass Production

The **PiXDRO JETx mass production inkjet printer** is Meyer Burger's most advanced platform for printing **functional materials**. It has a **modular architecture** and can be configured for a **wide range of applications** such as printed electronics, photo voltaic, OLED encapsulation, PCB solder masking, semiconductor packaging and chemical machining. The JETx is designed for 24/7 **fully automated production**, and is typically configured for processing large volumes of **customer specific products**.
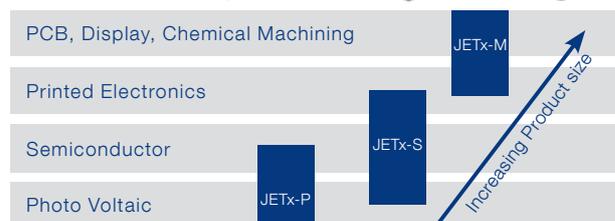
The JETx systems have a granite base for **superior stability** and extremely **high stage accuracy** and printing precision, combined with **high throughput** and **lowest cost of ownership**. It is based on three standard platforms, the **JETx-P**, **-S**, and **-M**, each system targeting specific application areas and product sizes.

Key Advantages

- Granite base for high stability and printing precision
- Modular architecture enables fast and reliable application specific functionality
- High reliability and productivity
- Flexible process flow editor
- Customizable configuration for best cost of ownership and process control
- Compatible with solvent based, aqueous, hot melt and UV-curable inks
- Easy to operate and maintain

Main Features and Options

- Multi printhead arrays
- Multiple ink supply systems
- Recirculating ink supply for nano-particle inks
- In-line UV, photonic and NIR pinning and curing
- Advanced fiducial and substrate alignment
- Print inspection stations
- Downflow control for clean environment
- Glovebox integration for inert environment
- Automatic substrate handling
- Connectivity to other processing equipment
- Temperature controlled substrate chuck
- Multi-lane substrate handling
- MES interface for factory automation

PCB, Display, Chemical Machining		JETx-M
Printed Electronics	JETx-S	
Semiconductor	JETx-S	
Photo Voltaic	JETx-P	

Increasing Product size

Technical Data

	JETx-P	JETx-S	JETx-M
Maximum substrate size	150 x 150 mm	300 x 400 mm	460 x 610 mm (18 x 24 inch)
Max. substrate thickness	10 mm	20 mm	20mm
Substrate clamping	Vacuum	Vacuum (optionally mechanical assist)	Vacuum (optionally mechanical assist)
Base frame	Steel	Granite	Granite
Stage accuracy	+/- 15 µm (3σ)	+/- 5 µm (3σ)	+/- 5 µm (3σ)
Stage precision	+/- 3 µm (3σ)	+/- 2 µm (3σ)	+/- 2 µm (3σ)
Motion	X, Y, Z, R_z	X, Y, Z, R_z	X, Y, Z (R_z optional)
Print speed	Up to 1000 mm/s		
Printheads	128 - 2048 nozzles per head; 2 - 80 pL dropsize		
Printhead exchange time	< 15 minutes, automatic calibration		
Maintenance (optional)	Fast nozzle scan, spitting, capping, wiping		
Vision systems (optional)	Drop view, print image view, pattern inspection		
User interface	Intuitive touch screen (according to SEMI E10)		
Image formats	Bitmap, Gerber, TIFF, postscript, PDF		
Ink types	Solvent based, nano-particle, aqueous, hotmelt, UV-curable		
Ink viscosity	2 - 20 cP		
Ink supply	Automatic ink refill (static or recirculating)		
Integrated post processing (optional)	UV pinning, UV curing, NIR curing		
Footprint (w x d x h)	Depending on configuration	1200 x 1700 x 2000 mm	1500 x 2000 x 2000 mm
Approx. Weight (stand-alone)	1200 - 1800 kg	1200 kg	1800 kg

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