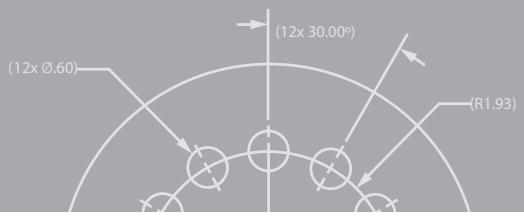
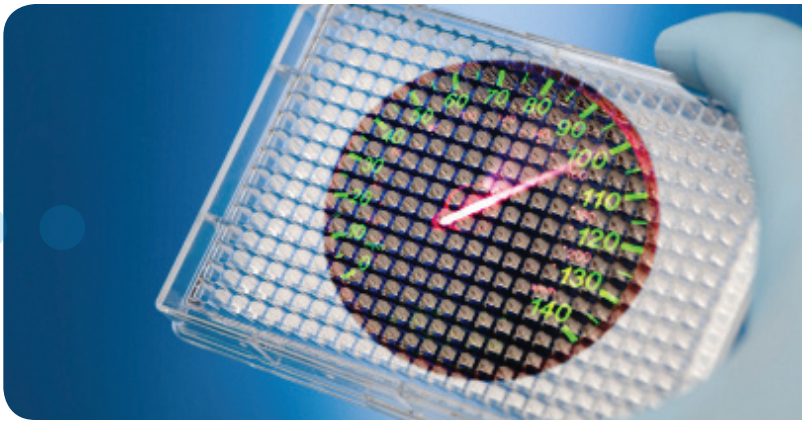
Quanterix™
The Science of Precision Health



2470 Arrayer

Stay on the Fast Track

with the multiplexing power of microarray technology



Rapid. Reliable. Accurate.
Experience the multiplexing power of microarray technology with the industry's most reliable microarray printing platform, providing high density printing with unequaled accuracy. And its unmatched flexibility allows you to use an incredibly wide variety of substrates and biological materials, including complex samples such as cell lysates and blood.

2470 Arrayer

The 2470 Arrayer is a high throughput microarrayer designed to provide rapid, quality printing using a wide variety of substrates and biological materials including complex samples such as cell lysates and blood. The 2470 was engineered with walk-away automation in mind and can operate 24 hours a day, 7 days a week without print interruption*.

Features

- Unmatched sample flexibility (DNA to Cell Lysates)
- Capable of printing on most any substrate
- High density printing with unequaled accuracy
- Fully enclosed printing platform
- User-friendly software interface

Benefits

- Reliable production of quality microarrays
- A single instrument for genomic & proteomic applications
- Quality printing of complex sample types such as cell lysates
- High level of automation for increased walk-away time

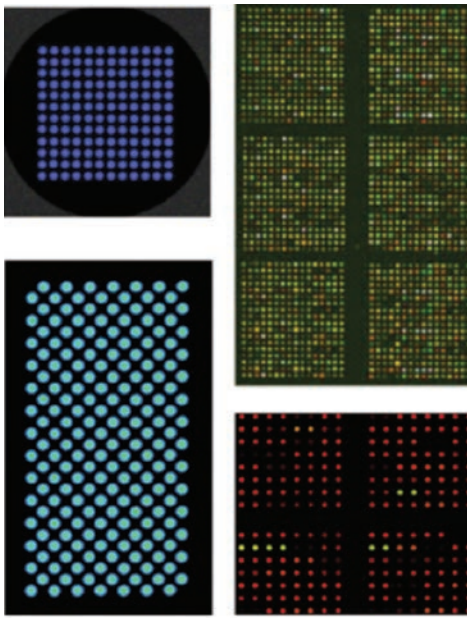
*with appropriate maintenance

Substrate and Sample Flexibility

The 2470 Arrayer has unmatched versatility, able to print any sample type onto substrates with unique shapes and chemistries as well as the most delicate of substrates such as nitrocellulose and silicon chips.

Quanterix' unique solid pin architecture reliably produces arrays of exceptional quality.

- DNA
- Antibodies
- Recombinant proteins
- Lipids & carbohydrates
- Small molecules
- Plasma & serum

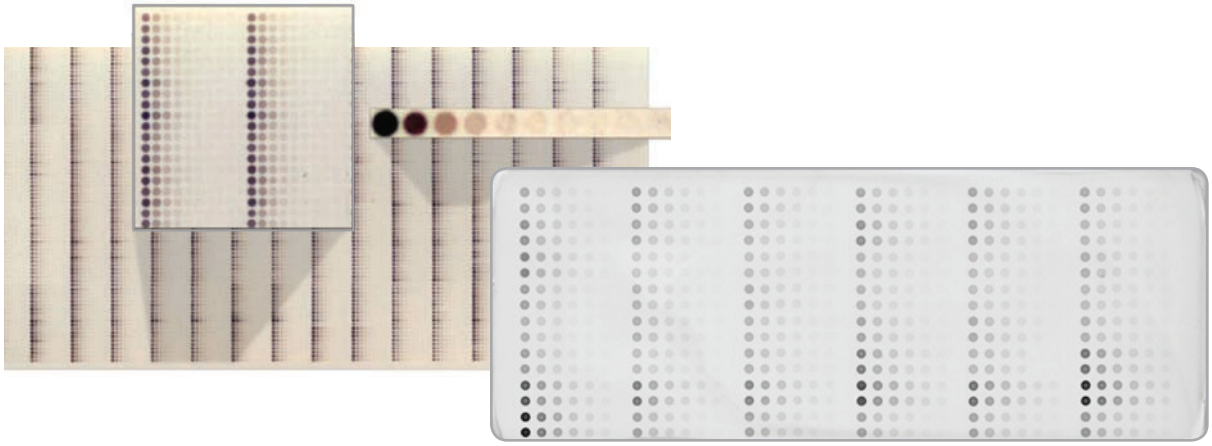


Clockwise from top left:144 spot/well array printed in a 96-well plate, DNA microarray, an antibody array, and a Cy3-tagged genomic sub-array.

Unmatched Protein Array Capabilities

The 2470 Arrayer is capable of high density protein arraying using purified proteins, antibodies and more complex biological samples such as cell lysates, plasma and serum.

Our proprietary deposition technology reliably produces cell lysate arrays of exceptional quality, overcoming the limitations associated with arraying viscous samples such as pin clogging and irregular printing observed using other arrayers. This makes the 2470 Arrayer the ideal choice for production of reverse phase arrays.

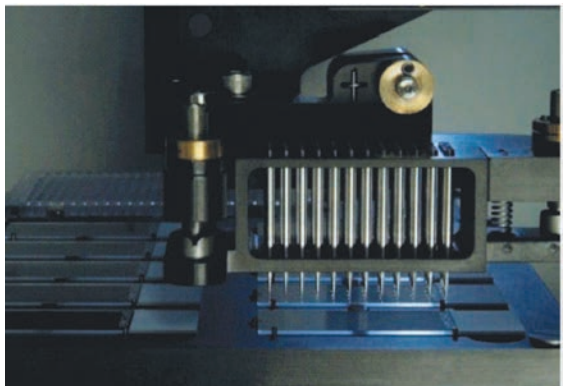


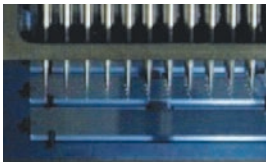
- Proteomics
- Biomarker Discovery
- Quality Microarray Instrumentation
- Reverse Phase Arraying
- Genomics
- Translational Medicine
- Gene Expression
- Protein Profiling
- Antibody Arrays

Proprietary Soft-touch Deposition

With its proprietary pin design and print architecture, the 2470 Arrayer is the most flexible and reliable microarray printing platform. It is a fully enclosed platform containing an environmentally-controlled print deck and all the support sub-systems necessary for printing.

The 2470 uses a unique sample exposure time compensation feature to eliminate any evaporation variability due to differences in the distance from sample plates and the substrates. It is features such as this in conjunction with Quanterix' exceptional pin quality that produce extremely low coefficients of variation (CVs), typically low single digit percentages. Quanterix' pins are manufactured with sub-micron tolerances and the instrument's motion axes utilize half micron position feedback scales to ensure exceptional print quality and consistency.

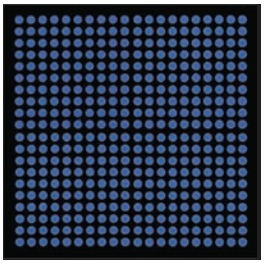




The 2470 Arrayer platform shown printing onto glass slides (above). A close-up of a 48-pin print head (left).

Unmatched Quality & Robustness

	Min.	Max.	Mean	Std. Dev.	CV%
Spot Diameter (microns)	288.09	313.03	300.75	4.41	1.47
X-axis Spacing (microns)	435.43	462.28	447.50	3.15	0.70
Y-axis Spacing (microns)	422.56	476.73	445.42	5.01	1.12
Roundness*	1.02	1.14	1.07	0.02	1.79
Average Signal (RFU)	5052.2	8119.5	6848.9	350.1	5.11
Total Signal (RFU)	3713343	6422536	5117520	329317	6.44

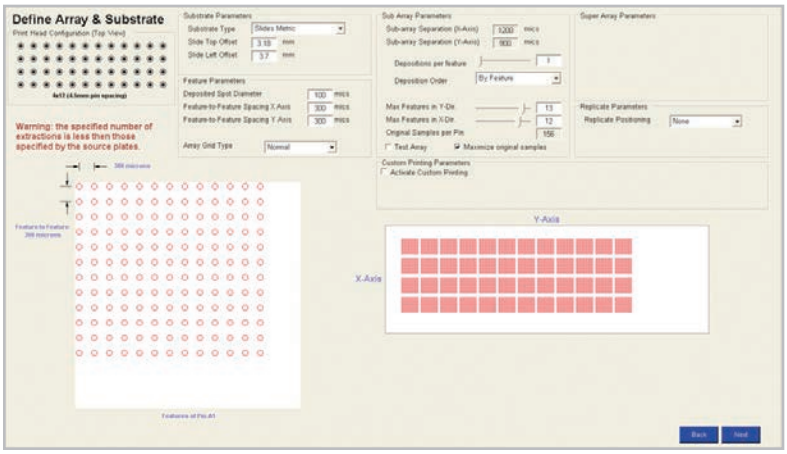


METHODS: Cy3-tagged antibody was printed onto an aminosilane coated slide using 4 pins, each pin printing a 10x10 array (400 spots total). The manufactured array was directly scanned following printing to eliminate variability due to slide processing (image at right). NOTE: These data are representative using the parameters described above. Actual coefficients of variation (CVs) are highly dependent on sample & substrate type as well as greatly affected by array processing. *Roundness is a measure of spot circularity calculated using the objects perimeter and area. Circular objects have a value close to 1.0, while more irregular objects have larger values.

User-Friendly Software Interface

The 2470 Arrayer's graphical user interface (GUI) is intuitive and simple to use, yet enables sophisticated control of all aspects of a print run.

Users are walked through a simple but comprehensive set of print run options, as well as detailed instructions for source plate and substrate platen loading. Additionally, users may recall previous print run settings to further simplify print run initiation. This interface also allows for effortless monitoring by displaying print run progress, warning messages and required user actions – ensuring reliable, high quality printing.



2470 Technical Specifications

Pin Type: proprietary solid pin design

Pin Diameters: 85, 110, 180 and 350µm standard sizes. Custom pin sizes are available.

Print Head: 1 print head with optional configurations of 4, 8, 12, 16, 32 and 48 print pins. Other print head configurations are available.

Source Plates: 1 to 30 microtiter plates with 96, 384 or 1536-well capacity.

Substrate Capacity: Up to 100 25x75 or 1x3 inch slides accommodated internally at any time. Substrate capacity per print run is not limited by the instrument's internal capacity (e.g. >100 slides per print run)

Wash: Fluid wash.

Maximum Deposition Rate (features per hour): Approx. 50,000 with a 48 pin print head; includes washing of print pins and loading and unloading of microtiter plates and substrate platens.

Humidity Control: Ambient to 80% RH.

Temperature Control (optional): Ambient to ambient +5°C.

Size (width x depth x height): 37 x 35 x 72 inches.

Weight (lbs): 400 lbs - option dependent.

Contact Quanterix

Contact your Quanterix account representative for a test drive today 617.301.9400. Or email us at sales@quanterix.com for more information about our products and services, or to schedule a meeting with your account representative.

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Quanterix is a company that's digitizing biomarker analysis with the goal of advancing the science of precision health. The company's digital health solution, Simoa, has the potential to change the way in which healthcare is provided today by giving researchers the ability to closely examine the continuum from health to disease. Quanterix' technology is designed to enable much earlier disease detection, better prognoses and enhanced treatment methods to improve the quality of life and longevity of the population for generations to come. The technology is currently being used for research applications in several therapeutic areas, including oncology, neurology, cardiology, inflammation and infectious disease. The company was established in 2007 and is located in Lexington, Massachusetts.