

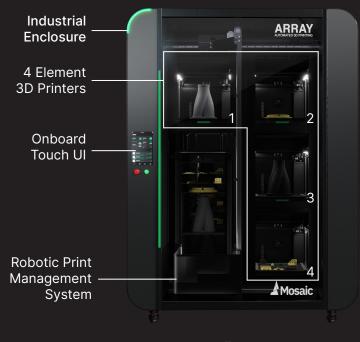
REPRESENTED BY: Allegheny Educational Systems, Inc. 320 East 3rd Avenue Tarentum, PA 15084 Phone: 800-232-7600 www.alleghenyedusys.com

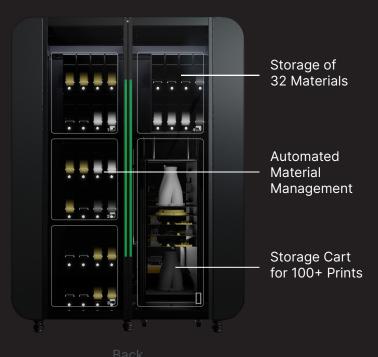
ARRAY Product Overview

High throughput. Low cost. No downtime.



A Fully Automated 3D Production System





Array's Production Benefits

Scalability

With Array, one operator can run the equivalent of 250 3D printers. Array's can work in parallel with each other, giving you a scalable approach to streamline your process at any required throughput.

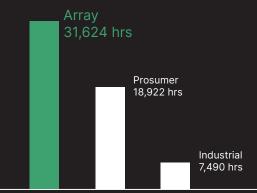
High Machine Utilization

Automation systems and storage cart allow Array to run for a min of 72 hours with no operator intervention. 24/7 up time leads to significant cost and throughput benefits.

Industrial Material Support

Leveraging Mosaic's lineup of materials, Array can print for a number of application and uses cases. Palette X also helps support multi-material workflows for unparalleled versatility.

Total Print Hours Per Year (Matched Budget)



158%

Throughput increase when compared to other similarly spec'd 3D printing solutions.

Array's Cost Benefits

Total Cost Per Print

Array's automation systems allow it to surpass the production quantity of prosumer and industrial printers. An Array unit can produce **10x the number of parts** when compared to a single prosumer or industrial machine.

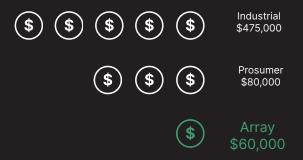
Upfront Cost

Array also represents a cost effective means to print with industrial grade materials in high quanity. When matching thoughput, **Array is 3/4 the cost of a comparable prosumer solution**.

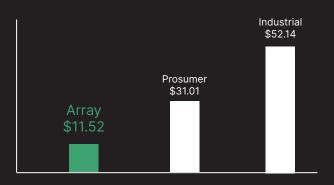
Material Cost

Mosaic Materials represent a high quality industrial materials solution that cost **25% less than proprietary materials** offered by other manufacturers. When printing in high volume, the savings are apparent.

Total Upfront Cost (Matched Throughput)



Average Cost per 100cc of Print Material



Array In Industry Objex Unlimited Case Study Snapshot - 3Dp Service Bureaus



- Both Element and Array could help bring down the total cost per part for the larger production loads ObjectX frequently has, by making higher grade materials more cost effective for large print jobs.
- Array's automation component also helps address the customer need for long running print jobs in the off hours, without always having to operate the printer.
- Canvas supports remote printing management and monitoring, vital for allowing ObjectX to easily manage high volume jobs, remotely.

Array In Industry McMaster Case Study Snapshot - Education



- Array's increased throughput and various automation features would allow McMaster to service the needs of hundreds of students per semester, increasing the opportunity to print multiple iterations of a project.
- Array's Robotic System is equivalent to having staff on hand 24/7 to start new prints when the current one is completed.
- By adopting Array, universities and Post-secondary institutions are able to increase their throughput, decrease the time requirements on staff, and better educate students on the core principles of their courses.

Array In Industry

Atheltic Knit Case Study Snapshot - Specialized Manufacturing





- Elimination of production bottlenecks found in the previous, traditional embroidery production process.
- Developed and validated a material and 3d printing process to digitize the traditional embroidery workflow allowing for an increase in customization and manufacturing flexibility
- Reduce the total cost per part by a projected 30% and increase their production throughput by a projected 40%.
- Increased overall efficiency and throughput with Array, resulting in cost & time savings and a production capacity increase.

Materials and Print Examples

Supported Print Materials*



*Includes support for Mosaic's high and low temp breakaway supports, and soluable support materials

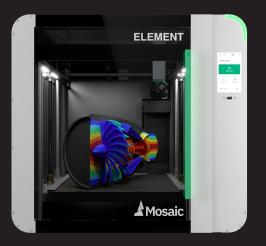
Element inside every Array

- 4 Printers each with build a envelope of 356 × 356 ×356mm (14 × 14 × 14")
- Heated bed up to 120°C
- Heated chamber up to 80°C
- 0.4mm hardened steel nozzle
- Maximum nozzle temp of 500°C

Automate your workflows with Canvas

- Remote Print Job Management
- Smart print queueing
- Material Pod Runout Detection and automatic changeover
- Track print and material analytics

Setups Main Workbench 1 Socchain, 15 min left	All Queues Progress -	Completed Last Updated + Entake Manifold Completed Today 09-12	Overview Last 3 Days - 51 8.1 ^{KM}
Main Workbench 2 (Estake Manifold S2min remaining	N. IN. IN. I	3obs Completed Filament Used +21% +15% Customize
Print Lab A Dec 11, 2020	21: Jonin remaining	Clutch Plate Completed 03/22/2020 10:08	Actions New -
Backup Setup Dec 7, 2020	Impelier - Batch 2 2 2h Jonis remaining	Const Const Const	Swap out material pod #5 (PETG) Print Lab A 2min ago
	Impeller - Batch 3 9 Overved 03/16/2020 16:55	Inventory Progress -	Feature update available Array 01 2min ago Swap out material pod #4 (PETG)
	Impeller - Batch 4 0 veveed 03/15/2020 16:31	Remaining after current queue Used by queued jobs Ready to HI	Print Lab A 2min ago Run out detected
	Bracket - Batch 1 Overved 03/16/2020 16:00	Mosaic PLA - Blue 30.6m remaining after queue	Print Lab B 2min ago
	Bracket - Batch 2 Queued 03/16/2020 15:23	Mosaic PLA - Yellow 43.7m remaining after queue	
	Bracket - Batch 3		
erformance		Material Usage	
		8000 6000	



Mosaic

Mosaic Manufacturing Ltd.

480 University Ave, Unit 802 Toronto, ON M5G 1V2 Canada

www.mosaicmfg.com



Mosaic Manufacturing

O @MosaicMfg

@MosaicMfg

ABOUT

Mosaic Manufacturing Ltd. is a digital manufacturing company creating the next generation of product delivery systems. Founded in 2014, Mosaic began by enabling 3D printers to create substantially more useful and valuable products. Now, we're working to scale this technology to help millions of people get value from the upcoming waves of customization and personalization.

Array was released in 2021 by Mosaic Manufacturing and is a breakthrough FFF machine capable of high throughput, multi-material 3Dp supported by Canvas software solution for easy operation. Learn more at Array's product page on our website.

READY TO GET STARTED WITH ARRAY?

See how Mosaic Printers can impact your business with our Total Cost Per Print Calculator

https://www.mosaicmfg.com/array

© 2021 All Rights Reserved.