

OPS 21

TOMORROW'S OPERATIONS —
FOR TODAY'S MANUFACTURERS



CASE STUDY - TOM'S SONS INTERNATIONAL PLEATING

About:

Operating since 1931, International Pleating is a family-owned fabric and textile pleating business. Their full-service facility provides all aspects of pleating services from sample development to production.

Employees:

5

Website:

www.tomssons.com

Location:

Garment District,
Manhattan, NY

KEY IMPACTS

67%

REDUCTION IN LABOR TIME
FOR PLEAT AND FUSE

\$5K+

SALES IN INITIAL MONTHS FOR
RESULTING NEW SERVICE, WILL
GROW SUBSTANTIALLY

<3 MONTH

ROI FROM INITIAL USE

AS A PIONEER IN THE FIELD OF PLEATING, INTERNATIONAL PLEATING HAS INVENTED MANY OF THE TOOLS IT USES. THEIR OPS21 GRANT FUNDED THE PURCHASE OF A 3D PRINTER THAT IS BEING UTILIZED TO MAKE CUSTOM PARTS (E.G. FIXTURES). THE 3D PRINTER HAS HELPED INTERNATIONAL PLEATING TO INNOVATE, REDUCE COSTS, AND INCREASE THE SERVICES THEY CAN OFFER, WHICH HAS IN TURN IMPROVED THEIR COMPETITIVENESS.

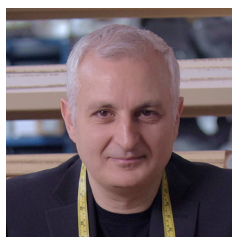
GRANT TECHNOLOGY AREA: Additive Manufacturing (3D Printing)

CHALLENGE / OPPORTUNITY

Prior to this project, International Pleating found themselves paying higher costs and waiting for custom parts ordered from third parties, resulting in downtime of their machines. Relying on outside machine shops for fixtures also resulted in overtime for International Pleating's staff, as they would need to make up time on orders that were delivered to them late. In addition, when creating a new fixture or tool, they spent considerable time searching for the best machine shop or supplier to make the needed part.

SOLUTION

To mitigate the challenges described above, International Pleating purchased a 3D printer so that when possible, they could develop their own unique solutions (tooling, fixtures) in-house, reducing the need to purchase externally. In addition, International Pleating has found that they can be even more open to unique custom services, as they now have the agility to rapidly design needed tools/parts and ideate on the fly, to meet their customers' unique needs.



The Ops21 grant gave me the nudge I needed to embrace this new technology. Our new 3D printer is like a Swiss army knife of endless solutions to any new projects that come our way. It gives us the confidence to deal with our customers' manufacturing needs promptly, so we don't miss any sales opportunities.

George Kalajian, Executive Director,
Tom's Sons International Pleating

RESULTS & INSIGHTS



INCREASED SALES

- Captured \$5K+ in initial sales for a new fabric pre-shrinking service; these sales resulted from International Pleating's ability to quickly 3D print parts to convert an existing machine in order to meet their customer's unique needs. Sales for this new service are expected to grow substantially.



COST SAVINGS

- Developed and 3D printed a new fixture that reduced the labor time to perform International Pleating's pleat and fuse service by 67%; this innovation will reduce labor costs for all products that require pleat and fuse operations going forward, ultimately reducing COGS.
- Avoided costs related to outsourcing work and reduced the time to obtain new tools needed.

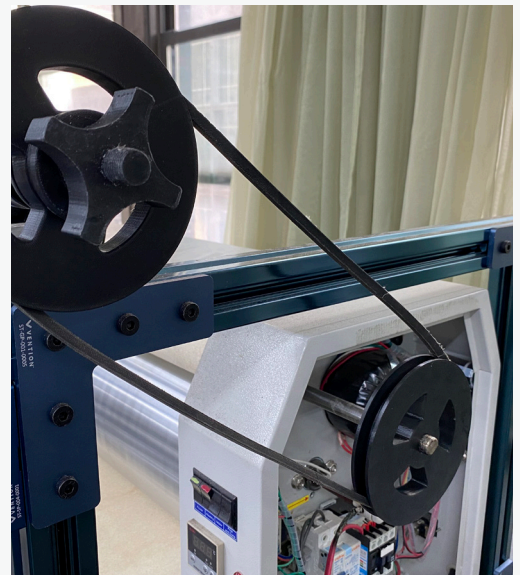


IMPROVED COMPETITIVENESS

- Improved agility to meet customer needs. With design and 3D printing capabilities in-house, initial mock-ups can be quickly printed for fashion designers, which increases International Pleating's competitiveness, especially during Fashion Week.



Our new Ultimaker 3D Printer



Sponge machine new 3D printed part



Antique side pleat example; geometric silk print that has been fused.

OPS21 PROGRAM OVERVIEW

Ops21 is a multi-faceted program designed to help NYC manufacturers learn about and adopt advanced technologies, specifically advanced materials, robotics, and digital manufacturing. It is part of the greater Futureworks NYC initiative, which aims to help manufacturers embrace advanced technologies and increase local production.

Ops21 Grant funds are generously provided via the Futureworks NYC Ops21 program, which is funded by the New York City Economic Development Corporation (NYCEDC) and led by the New York City Industrial and Technology Assistance Corporation (ITAC).