



THREDUP ORDER PACK-OUT SYSTEM



THREDUP

CLIENT

thredUP

PROJECT SCOPE

Engineering,
Electrical & Mechanical Installation,
Controls Design & Programming

INDUSTRY

Apparel
e-Commerce

LOCATION

Southeastern United States

[\(Follow this link to view a video of this project\)](#)

SilMan Industries designed and implemented a mixed polybag-carton system in a new regional Fulfillment Center for thredUP, one of the world's largest online resale platforms for women's and kids' apparel, shoes and accessories.

The Situation

Secondhand clothing and online apparel platforms are experiencing high-demand and increased competitiveness. thredUP turned to SilMan to support its growth in the region served by this facility.

After months of close collaboration, SilMan presented a system solution to meet the efficiency, cost-savings, and customer service needs for thredUP while projecting a pathway toward additional future improvements.

Results

The upgrades proposed and implemented by SilMan improve manifesting and shipping systems to increase its order fulfillment speed and capacity.

These improvements provide thredUP with an overall throughput increase, despite the introduction of a polybag-carton mix, and reduces process time, labor, and potential human error.

The project has built-in scalability to cost-effectively accommodate Phase 2 of the solution, which doubles pack station capacity while maintaining the newly improved throughput levels.

The Order Pack-Out Project

The newly integrated **Order Pack-Out System** includes all conveyance, in-motion weighing, automatic dimensioning, automatic printing and applying shipping labels, and automatic sorting to carrier locations.

- **Order Pack-Out** equipment and sorter equipment allows for the conveyance and sortation of polybags mixed with cartons.
- Automatic weight capture by integrated **In-Motion Scale** reduces or eliminates errors in shipment weights and minimizes manual weight capture.
- Automatic carton **Dimensioning** provides accurate data to the manifest system for shipping prices.
- **Automated Print and Apply** system applies labels on both polybags and cartons, reducing or eliminating manual handling, and increasing throughput and accuracy.
- State of the art **System Hardware** conveys and sorts polybags and cartons, increasing overall throughput and reduce manual handling.

Key Elements for Success

The high levels of performance achieved on this system have been enabled by a notable spirit collaboration and ease of communication between the thredUP and SilMan teams.

Scope of Work

The multi-discipline structure of the SilMan Team was essential in producing the quality and efficiency achieved during the project life of this implementation. In particular, the constant collaboration of engineering and project management teams throughout the entire engineering and execution phases of the project.

- SilMan's Tupelo-based engineering team provided detailed engineering design and application support for the fully engineered system.
- Procure all material handling equipment and controls equipment.
- Mechanical and Electrical installation.
- SilMan's "Unison" system controls were utilized for all client interfaces and software, installed by the SilMan Controls Group.

UNISON



SilMan’s **Unison Warehouse Control System** is at the heart of the outcome for thredUP: a single resource that provides an automated solution to handle the mix of polybag and carton packages.

The Unison controls solution provides an interface with the thredUP warehouse management system, data interchange, and control of peripheral equipment:

- In-motion scale
- Dimensioning
- Automated Print and Apply
- Scanners and Cameras
- Sortation

Functionally, the Unison system controls diversion of packages as needed, photo-eyes/scanners to identify and monitor packages, tracking of packages by carrier, confirmation scanners, and sortation.

Equipment Deployed

We are grateful for our top-grade partners for their vital contribution to this project.

Partner	Contribution
TGW	Conveyor Systems
Intralox	Centering Belt, Sorter
Interroll-Portec	Powered Belt Curves
Conveyor Solutions	Sort-Slide Accumulator
Cognex	Cameras and Scanners
OCS Technologies	In-motion Scale
Panther Industries	Print and Apply Labeling System
Heartland Engineering	Conveyor Crossover Stair System

Meet thredUP

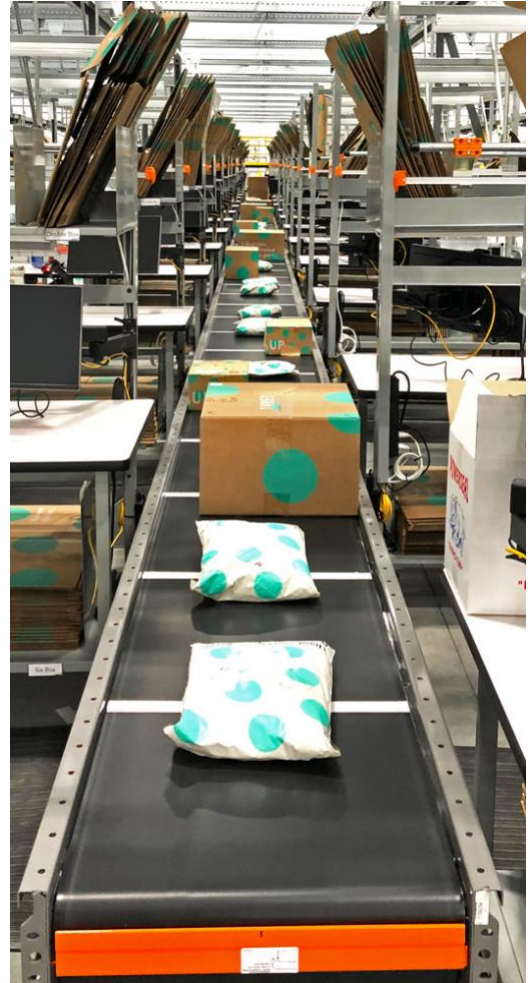
“thredUP is part of a larger Collaborative Consumption movement, which encourages consumers to live in a more collective, sharing economy.” — Everipedia.com

With a rallying cry of Let’s Make a Real Fashion Statement, Choose Used” thredUP is doing a lot more than just selling clothes. Since its foundation in 2009, the Oakland-based online retailer has made it clear that they are on a mission to revolutionize the fashion industry.

The website is brimming with secondhand items from over 35,000 brands across 100 categories and across price points, yet the message is clear: fashion contributes to the deterioration of the environment, and thredUP intends to change that in a big way.

The company has been growing, and with a [Walmart collaboration announced in May 2020](#), the company is expanding its Resale as a Service partnerships

And not surprisingly, as an online resale platform for women’s and kids’ apparel, shoes and accessories, the company is also very popular on social media with [over 2 million followers on Facebook](#).



About SilMan

SilMan Industries (previously SilMan Construction) is based in San Leandro, Calif. Founded in 2008, the firm operates nationwide in three divisions – Construction, Material Handling and Site Services – and partners with “best in class” companies nationwide providing integrated solutions in the Industrial, Manufacturing, Distribution, and Public Works sectors. For more information, please visit www.silmanindustries.com/about.