

Sole Technology, Inc.

Lake Forest and Fontana, California

About Sole Technology, Inc.*

Sole Technology, Inc. (STI) is a globally recognized leader in action sports footwear and apparel. With revenues exceeding \$200 million and products available in more than 70 countries, it is the largest privately-held action sports company in the world. The company's well known brands include: etnies, etnies Girl, etnies Plus, éS, Emerica, Altamont and ThirtyTwo.

With its dedicated Research and Development Laboratory (the STI Lab), the company is also a leader in biomechanical research and product testing. All STI products are created by action sports enthusiasts, and its footwear, apparel and accessories are renowned for style, quality, function, innovation and durability. STI is the only action sports company owned and operated by a former world champion skateboarder, Pierre André Senizergues.

The Concept

STI's business is thriving, but its operations were outgrowing its three-facility structure. The company needed more operating space in order to meet future growth and satisfy customer demands.

STI asked Tompkins Associates (Tompkins) to assist with centralizing and improving its distribution operations. Tompkins developed a distribution strategic master plan to consolidate STI's three-building structure into one facility that would serve its needs through 2015.

Challenges & Strategies

STI selected a new building with 315,000 square feet of floor space. With the new facility in place, Tompkins designed, implemented and supported:

- an improved picking process
- a sortation system
- an improved packing operation
- value-add processing areas (VAS)
- a warehouse management system (WMS) upgrade

At A Glance

Challenge: Consolidate and optimize operations

Solution: Utilize vertical space, create fluid sortation, implement three-level pick modules, and integrate a new WMS



Allowing for future growth, Tompkins designed the layout to include **expansion room** for future pick modules, pallet storage, and automated receiving.

The Mezzanine: To maximize space and ensure the building supported future growth requirements, Tompkins designed the new layout to fully **utilize the vertical space** in the building.

The layout placed the areas for packing, carton sealing, VAS, inspection, quality control, and the shipping sortation system on a 19,245 square foot mezzanine above the shipping area. Pallet build lanes, sortation accumulation lanes, fluid trailer loading lanes, pallet wrapping stations, and shipping staging locations were placed below the mezzanine. The shipping sorter was designed with three fluid lanes and five less-than-truckload (LTL) pallet build lanes.

The Pick Module: Tompkins also **designed a state-of-the-art, three-level pick module** to meet customer requirements and accommodate a broad SKU base that includes footwear, apparel, and accessories. The pick module includes a zone-routing conveyor system which allows orders to start in any zone and only diverts cartons into zones where there is picking activity. Once a carton is picked complete, the carton is diverted and conveyed directly to the packing mezzanine.

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This picking system drastically **reduced the number of times a carton had to be handled** from the previous picking system. The pick module also included an empty corrugated box conveyor that **routes empty cartons to a baler for recycling**. This was important because STI actively supports environmental initiatives and aims to be carbon-neutral by the year 2020.

The WMS: Additionally, STI implemented an **upgrade to their existing WMS**. Tompkins provided support to ensure the WMS detail design would fluidly integrate with the operations and material handling equipment (MHE) designed by Tompkins. To ensure a successful WMS implementation, Tompkins also **provided testing, as well as operations and start-up support**.

The Results

By implementing the improved picking system, the **picking process became more efficient and labor costs were reduced**. Facility **throughput increased** with the use of RF picking and the zone-routing system with automated diverts at each picking zone. Moreover, the improved WMS appropriately supported the new operational requirements and MHE.

STI can now pack more items per outbound box, which reduced per-unit shipping costs and greatly **improved customer satisfaction**. In addition, STI was able to reduce its overall labor costs, due to less handling through the entire process, and still fulfill more units per day.

The company **receives and fulfills orders much quicker** than before, and customers now receive their entire order, shipped at the same time — instead of smaller shipments in increments. The new operating processes allow for **faster shipments**, and STI has more strategic flexibility to **better respond to rapidly-changing customer requirements**.

Overall, the project successfully increased the processing volume while simultaneously lowering STI's labor requirements.

“Working with Tompkins Associates, we were able to design and implement a brand new distribution center in 12 months. The new facility is helping us support our growth needs, as well as better satisfy our customer requirements. The overall process, or implementation, was actually quite smooth and the new DC is performing well beyond our expectations.”

Theo Song
Vice President of Supply Chain
Sole Technology, Inc.

*Source: Sole Technology website www.soletechnology.com



Innovative, practical solutions that improve supply chain performance and produce value-based results

Tompkins Associates designs and integrates global end-to-end solutions for companies that embrace supply chain excellence. For more than 30 years, Tompkins has evolved with the marketplace to become the leading provider of global supply chain services, distribution operations consulting, technology implementation, material handling integration, and benchmarking and best practices. The company is headquartered in Raleigh, NC. For more information, visit www.tompkinsinc.com.