



## Industrial Seaming & Sealing

### Superior Finishes for Demanding Applications

Fairway Products specializes in delivering robust and reliable seaming and sealing solutions for a wide range of synthetic materials. Our decades of experience and advanced Sonic & Fabric Welding techniques, eliminates the need for traditional needle and thread, resulting in superior seam integrity and performance.

Welded seams are just as strong as sewn ones without having to perforate the material. The sonic welder generates the heat required through vibration. This heat will cause the fibers of the fabric to melt, allowing them to attach to each other. The fabric welder generates the heat required via a heating element. The fabric is passed by the element, which starts the melting/softening. The fabric is then passed through a set of rollers that presses the layers together.

Our experts, equipment, and processes will empower your business to get more work done, faster.



## Your Vision, Our Mission

At Fairway Products, we are committed to exceeding your expectations. Our dedication to quality, innovation, and customer satisfaction sets us apart. We go the extra mile to find solutions, whether it's sourcing specialized equipment, developing custom fixtures, or streamlining your inventory management.



## The Power of Fairway

Discover the transformative impact of our industrial seaming and sealing. Beyond just stitching materials together, we engineer superior products through advanced manufacturing and welding techniques. Our expertise, coupled with state-of-the-art equipment, delivers unmatched strength, durability, and efficiency. Experience the Fairway difference and unlock the full potential of your product.

### Applications

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| ⚙ Industrial Tarpaulins and Covers       | ⚙ Aerospace Components and Filtration      |
| ⚙ Medical Bags and Equipment             | ⚙ Environmental Protection and Containment |
| ⚙ Marine Fabrics and Awnings             | ⚙ Banners and Signage                      |
| ⚙ Transportation Seating and Interiors   | ⚙ Sports Equipment and Covers              |
| ⚙ Military Gear and Ballistic Protection | ⚙ Cleanroom and Laboratory Supplies        |



## Features

- ★ **Sonic Welding:** High-frequency vibrations generate heat, melting and fusing the fabric fibers together for a secure bond.
- ★ **Fabric Welding:** Heat from a heated element softens the fabric, which is then pressed together by rollers to create a durable seam.

## Benefits

- ✓ **Unmatched Strength:** Our welding processes create seams that are equally strong, if not stronger, than traditional sewn seams.
- ✓ **Enhanced Durability:** Seamless construction provides exceptional resistance to abrasion, tears, and leaks.
- ✓ **Critical Application Ideal:** Perfect for applications where puncture resistance and product integrity are paramount.
- ✓ **Efficiency Gains:** Our streamlined processes accelerate production times and reduce labor costs.

## Seaming & Sealing Capabilities



### Sonic & Fabric Welding

Achieved through Sonic and Fabric Welding, eliminating needle holes for a stronger, more reliable finish.



### Abrasion Resistance

Our seamless construction techniques resist abrasion, tears, and leaks, ideal for critical applications.



### Smooth Finishing

Achieve a clean, professional aesthetic with our advanced welding & thread free seaming processes.

## Materials & Equipment

## Specifications

### Miller Weldmaster T300 Flex

- Quick setting recall with easy operation touch screen and recipe storage
- Increased product versatility with dual arms to configure straight or curved seams
- Quick, repeatable head adjustments for precision welding
- Available in hot air, hot wedge or both for product versatility
- Multiple seam configurations for quick, easy guide change
- Can be customized to fit your exact specifications

### Sonobond

- Versatile, general purpose machine works just like a traditional sewing machine
- Cuts, "sews" and trims in one pass
- Available in variety of stitch patterns
- Operates without the use of thread, glue or other consumables

## Materials

⚙️ Nylon

⚙️ Polypropylene

⚙️ Plastic



FAIRWAY PRODUCTS  
Textile Cutting & Fabrication

# Industrial Seaming & Sealing

## Key Equipment



## Key Markets



Aerospace



Automotive



Industrial Fabrics

## Case Study

### Innovative Coat/Sleeping Bag: Fairway Products Collaborates with a Michigan Non-Profit to Manufacture Transformative Outerwear



**Summary:** Fairway Products recently partnered with a Michigan-based non-profit organization dedicated to training individuals for manufacturing careers. Together, they produced an innovative coat that transitions into a sleeping bag, offering both functionality and comfort. This project highlights Fairway Products' expertise in program cutting and their commitment to supporting transformative initiatives through precision manufacturing.



## Project Specifications

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- ⚙️ **Product Type:** Multi-functional coat/sleeping bag
- ⚙️ **Materials Used:** Laminated and quilted fabrics
- ⚙️ **Dimensions:** Standard sizes for both adult and child versions
- ⚙️ **Features:** Durable, weather-resistant exterior, insulated interior for warmth, and easily convertible from coat to sleeping bag

## Uses and Applications

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This innovative coat/sleeping bag is designed primarily for individuals experiencing homelessness, providing them with a versatile solution for warmth and protection. It is also suitable for emergency response teams and outdoor enthusiasts who require reliable, multi-functional gear.

## Scalability of the Project

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- **Initial Run:** The initial production involved creating a batch of 500 units to test the manufacturing process and address any potential challenges.
- **Expansion Potential:** With the success of the initial run, the project has the potential to scale up to thousands of units annually, meeting the increasing demand for this innovative product.

## Manufacturing Process

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Fairway Products utilized their state-of-the-art CNC (Computer Numerical Control) equipment to precisely cut shapes from laminated and quilted materials. This program cutting technique allows for efficient nesting of various cut sizes, minimizing material waste and maximizing the use of each roll of fabric.





## Quality Control Steps

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### **MATERIAL INSPECTION**

All incoming materials are thoroughly inspected to ensure they meet the required quality standards.



### **PRECISION CUTTING**

CNC equipment is calibrated regularly to maintain cutting accuracy and consistency.



### **SHAPE PACKAGING**

Cut parts are packaged by shapes, enabling easy access and assembly for the non-profit's manufacturing team.



### **FINAL INSPECTION**

Each batch of cut parts undergoes a final quality check to confirm they meet the specified dimensions and quality criteria.



### **ISO 9001:2015 CERTIFICATION**

Fairway Products adheres to the rigorous standards of ISO 9001:2015, ensuring consistent quality management and customer satisfaction.



By leveraging their advanced manufacturing capabilities and commitment to quality, Fairway Products has played a crucial role in bringing this innovative coat/sleeping bag to life. This collaboration not only supports the non-profit's mission but also demonstrates Fairway Products' ability to deliver high-quality, scalable solutions for diverse applications.

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## **Contact Fairway**

Need assistance in maximizing manufacturing efficiencies to ensure quality and optimize costs? Call or email us today and one of our skilled team members will lead the way. [\(517\) 437-8940](tel:5174378940) ~ [Fairway@acmemills.com](mailto:Fairway@acmemills.com)