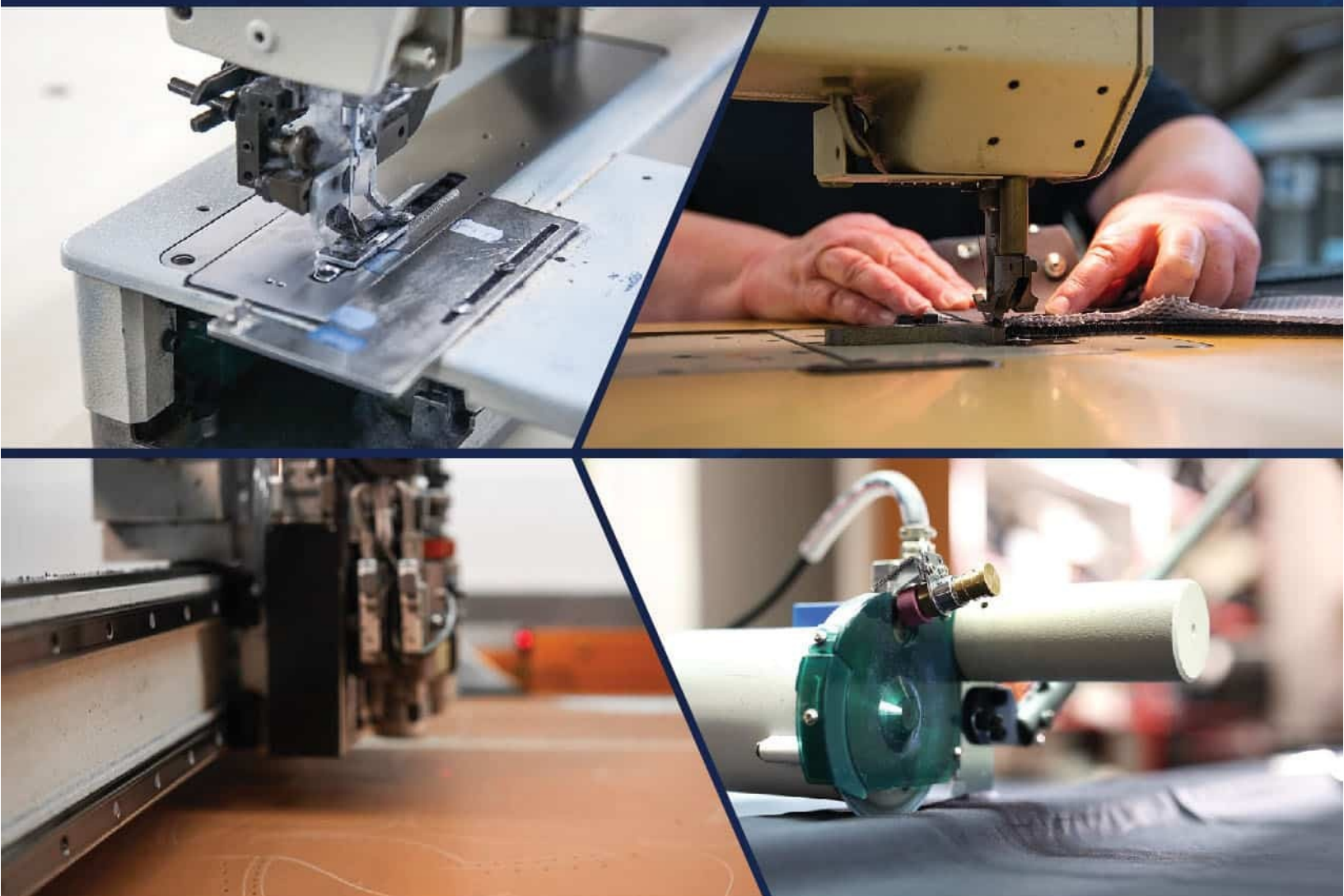




# FAIRWAY PRODUCTS

Textile Cutting & Fabrication



*World Class Textile Solutions*



(517) 437-8940



301 Arch Avenue, Hillsdale, MI 49242



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## Fairway Products: Your Trusted Manufacturing Partner

**Fairway Products** is an ISO 9001:2015 certified manufacturing facility operating on a 3-shift schedule. We specialize in providing a diverse range of products and services to the automotive, office furniture, and general industrial sectors.



## Our Expertise

- ✓ **Fabric Die Cutting Services:** Precision cutting tailored to your needs.
- ✓ **Commercial & Industrial Sewing:** Expert craftsmanship for durable products.
- ✓ **Seaming & Sealing:** Reliable and efficient bonding solutions.

## Our Capabilities

Leveraging state-of-the-art equipment, including the Pathfinder CNC Machine, Duplex Slitter Machine, and ATOM F1 EDI Die Cut Machine, we deliver exceptional results. Our ability to cut, sew, and assemble, combined with the strengths of Acme Groups other business units, allows us to manufacture components, sub-assemblies, and finished products that meet the highest quality standards and cost-efficiency requirements.

### Our Expertise

As a manufacturing company, we excel in a wide range of textile services, including CNC fabric and material cutting, commercial & industrial sewing, seaming, sealing, slitting, rerolling, and product development. We are committed to providing our customers with innovative and effective solutions.

### Markets Served

Our capabilities extend across a broad spectrum of industries, encompassing aerospace, airline, marine, mass transit, RV, theater & automotive seating, chemical, construction textiles, disposable isolation gowns, face masks, food & beverage, furniture, industrial textiles, manufacturing, medical, military, pharmaceutical, and thermoforming applications.

## Our Commitment

We are dedicated to building strong partnerships with our customers. Our ability to perform a wide range of cut, sew, and seam sealing services, coupled with our expertise in product design and process engineering, enables us to deliver innovative and effective solutions tailored to your specific needs.

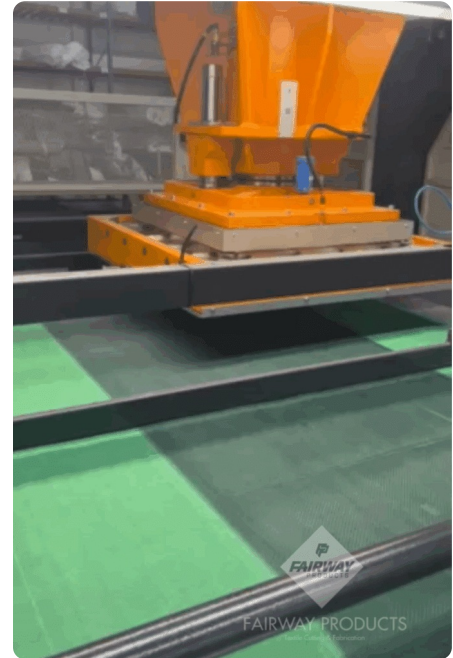




## Filter Media Cutting and Converting Services

### *Precision Cutting for Superior Filtration*

At Fairway Products, we specialize in precise **filter media converting** and **custom cut filter media** services to meet the diverse needs of industries requiring high-quality filtration solutions. With a focus on efficiency, customization, and [stringent quality standards](#), we deliver exceptional results for applications ranging from food and beverage filtration to [life sciences and industrial use](#). Our **industrial contract sewing** capabilities further enhance our ability to provide comprehensive solutions, offering custom cut [filter media and converting services](#) to meet the specific requirements of each project.



## Solutions & Applications

Our cutting and converting services support a wide range of industries, including:



FOOD AND BEVERAGE



LIFE SCIENCES



INDUSTRIAL  
MANUFACTURING



OSPITALITY





## The Power of Fairway

Our team leverages advanced technologies and decades of expertise to offer tailored cutting and converting services for filter media. Whether it's die-punching intricate designs or CNC cutting for precision, Fairway Products ensures every cut meets exact specifications.

### Key highlights include



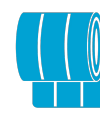
#### DIE PUNCHING

on our Atom machine for large-scale, high-accuracy production.



#### CNC CUTTING

for programmable precision, ideal for complex or specialized projects.



#### SLITTING SERVICES

for producing rolls of filter media tailored to exact widths.

### Our services are used in a variety of critical applications, including:

#### Food & Beverage

Custom fryer filters for commercial units.

#### Pharmaceutical and Life Sciences

Lyophilizer filter trays and plasma filtration media.

#### Industrial Processing

Filtration media for chemical and oil processing.

#### Hospitality

High-capacity fryer filtration for fast food chains and catering.

#### Snack Manufacturing

Hot oil filtration for nut frying and snack food production.

### Features

#### Precision Cutting:

Advanced die-cutting and CNC cutting ensure every piece fits perfectly into its intended application.

#### Custom Design:

Tailored solutions to meet unique size, shape, and material requirements.

#### High Scalability:

From small prototype runs to large-scale production, we adapt to your needs.



## Benefits

- ✓ **Cost Efficiency:** Minimized waste and reduced material usage through optimized cutting processes.
- ✓ **Improved Performance:** Filter media precision enhances efficiency and extends product life.
- ✓ **Regulatory Compliance:** Materials meet strict FDA, NSF, and ISO standards for food, medical, and industrial applications.
- ✓ **Streamlined Operations:** Custom packaging and inventory management solutions reduce handling and storage costs.

## Key Capabilities



### DIE PUNCHING

Rapid, repeatable, and precise cutting for high-volume production.



### CNC CUTTING

Programmable precision cutting for intricate or low-volume needs.



### SLITTING

Custom-width rolls for seamless integration into automated systems.



### CUSTOM LABELING AND PACKAGING

Branded and private-label solutions for aftermarket and OEM programs.

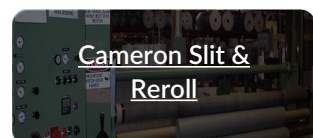
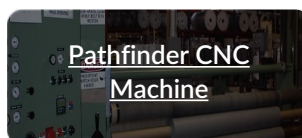
## Materials & Equipment

### Materials We Work With

- ⚙️ **Filpaco Textiles:** Renowned for their fine particulate filtration properties.
- ⚙️ **FDA-Certified Rayon:** High heat resistance and exceptional durability for food-grade applications.
- ⚙️ **High-Performance Filter Papers:** Optimized for biopharmaceutical and chemical applications.
- ⚙️ **Synthetic Nonwoven Fabrics:** Ideal for industrial and life sciences filtration systems.

## Key Equipment

- ⚙️ **Atom Die-Cutting Machine:** High-capacity, precise die-cutting for large-scale projects.
- ⚙️ **CNC Cutting Machines:** Advanced programmable cutting for complex patterns.
- ⚙️ **Slitting Machines:** Custom roll production to meet diverse operational needs.





## Comprehensive Textile Sewing Solutions

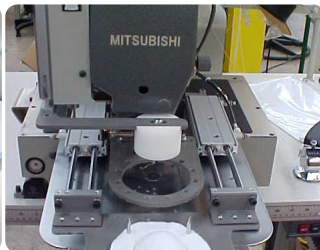
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### *Industrial Sewing, Product Development, and Nonwoven Filtration*

Fairway Products' industrial sewing capabilities provide us with a quality-oriented and cost-efficient background to manufacture products to our customers' specifications. Along with our industrial sewing services, we can also provide product development and engineering skills to work with woven and non-woven fabrics, vinyl, foam, laminates, leather, and more. Our contract industrial sewing services can help you grow your ideas into a prototype, and we can support anything from small runs to mass production runs.

Because of their unusually high wet strength, light weight, good chemical resistance and low cost, nonwovens are outstanding for many filtering applications. We not only specialize in nonwovens for coolant filtration and offer a complete range of densities and micron ranges, but we are also able to cut and sew filter pouches, socks, tubes, and bags out of woven and nonwoven filter fabric.

An experience engineer can help you choose the optimal material, and our inhouse converting plants will ensure a quick turnaround and affordable pricing.



## The Power of Fairway

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Fairway Products is committed to providing high-quality industrial sewing services that meet the rigorous standards of our diverse clientele. Our experienced team, state-of-the-art equipment, and dedication to excellence ensure that every project is completed to the highest specifications.





## Applications

### SEATING & SEAT COVERS

Seat covers, headrests, and other interior components.

### FILTRATION

Air filtration systems, Needle & Thread debris filters, Lint traps, vacuum systems, water filtration systems

### MEDICAL & HYGIENE

Surgical covers, patient positioning devices, and protective gear.

### OUTDOOR STORAGE COVERS & BAGS

Tarpaulins, storage bags, fabric covers, storage covers, storage totes

## Features

- ★ **Contract Sewing:** Custom sewing projects executed with precision and efficiency.
- ★ **Cut and Sew Operations:** Combining cutting-edge technology with skilled craftsmanship to produce superior products.
- ★ **Assembly Services:** Integrating multiple components to create complete, functional items.

## Benefits

- ✓ Quality-oriented and cost-efficient manufacturing
- ✓ Expertise in woven and non-woven fabrics
- ✓ Ability to handle small and large jobs
- ✓ Experienced engineering support
- ✓ Quick turnaround and affordable pricing
- ✓ Large stock of fabrics for prompt delivery
- ✓ Over 65 years of industrial sewing experience
- ✓ Expertise in industrial and food grade non-woven and woven fabrics for air and liquid filtration

## Sewing Capabilities



Single Needle



Double Needle



Walking Foot and Needle Feed



## Materials & Equipment

### Specifications

- ⚙ Cylinder Arm
- ⚙ Programmable Sewing
- ⚙ Capable of sewing heavy textiles
- ⚙ Array of custom attachments for Folding and Binding
- ⚙ Serging
- ⚙ Tubing
- ⚙ Juki and Mitsubishi Machines
- ⚙ Needle feed to heavy duty walking feet
- ⚙ Zig zag capabilities

### Materials

- ⚙ Heavy duty textiles such as leather, vinyl, felt, non-wovens, light plastics
- ⚙ Complex shapes and patterns
- ⚙ Repeatable sew patterns

### Key Equipment



### Key Markets



**Automotive**



**Industrial Fabrics**



## Industrial Seaming & Sealing

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### *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

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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

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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

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

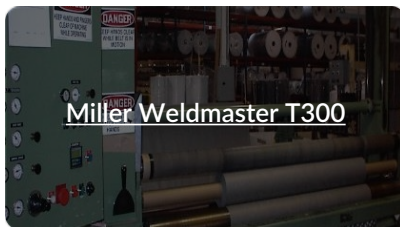
#### Sonobond

- 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

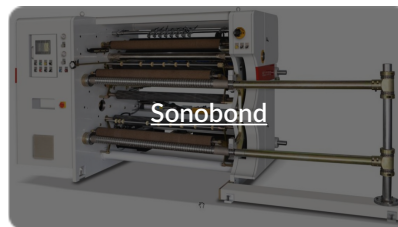
### Materials

- |             |                        |             |
|-------------|------------------------|-------------|
| • Nylon     | • Polypropylene        | • Plastic   |
| • Vinyl     | • Rayon                | • Adhesives |
| • Polyester | • Thermoplastic Rubber | • Grommets  |

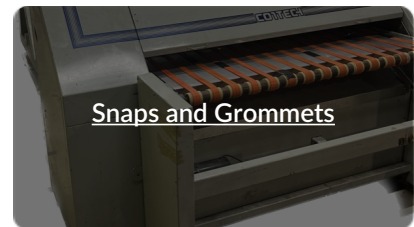
### Key Equipment



Miller Weldmaster T300



Sonobond



Snaps and Grommets

### Key Markets



**Aerospace**



**Automotive**



**Industrial Fabrics**



## Precision Textile Cutting

*Program and die-cut Custom Fabric, Filter, and Pad Solutions for Diverse Industries*

### PROGRAM CUTTING



For over six decades, Fairway Products has been a leading provider of precision die-cut and program-cut components, specializing in fabrics, filters, and pads for a wide range of industries, including medical, automotive, and pharmaceutical. Our commitment to quality, innovation, and customer satisfaction has made us a trusted partner to businesses worldwide.

Leveraging state-of-the-art CAD systems, our expert team optimizes material usage to deliver cost-effective and high-quality die-cut and program-cut

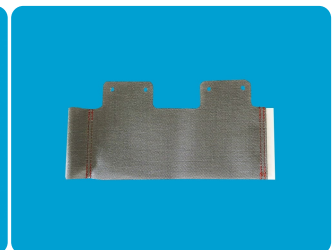
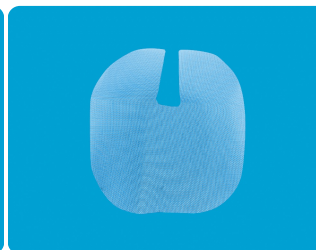
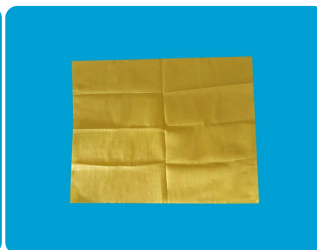
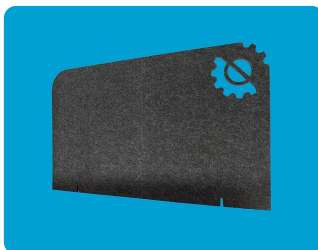
### DIE CUTTING



components. From intricate shapes to complex patterns, we offer tailored solutions to meet your exact specifications. Whether you require small-batch prototypes or large-scale production runs, we have the capacity and expertise to handle your project efficiently.

Our Filpaco filter papers renowned for their exceptional performance and versatility are available in a variety of grades, which can all be custom cut to suit the unique requirements of your filtration process. From fine particulate removal to liquid clarification, we have the ideal filter paper solution that can be cut to fit your exact application.

Our comprehensive services extend beyond die cutting and program cutting and filter paper production. We offer expert consultation to help you select the optimal materials and configurations for your specific needs. Our prototyping capabilities allow you to visualize and refine your product before committing to full-scale production. Additionally, our experienced technicians provide ongoing support to ensure your complete satisfaction.







## The Power of Fairway

Do you need custom fabric, filter, or pad solutions? Fairway Products offers a comprehensive die cutting and program cutting service for various industries. We utilize advanced technology and expertise to deliver precise cuts, reduced waste, and efficient production. From medical dressings to automotive gaskets, our capabilities cater to a wide range of applications. Explore the benefits of Fairway's precision cutting and discover how we can streamline your manufacturing process.

## Applications

### MEDICAL & HYGIENE

Dressings, filters, swabs, wipes, bandages

### SEATING & SEAT COVERS

Buses, Airplanes, RVs, ATVs, Trucks

### FILTRATION

Dust collection, oil mist, fabric/textile pre-filters, HVAC filters

### INDUSTRIAL MANUFACTURING

Gaskets, wipes, insulation

## Features

### PRECISION CUTTING:

- Gerber and Pathfinder cutters for accurate results
- Handles materials up to 90" wide and 1.5" thick
- Drilled holes from 1mm to 6mm
- Tension-free spreading for textiles

### CUSTOM SOLUTIONS:

- No tooling required for program cutting
- Easy program modifications
- Steel rule dies for intricate designs
- Multi-ply cutting capabilities

### MATERIAL VERSATILITY:

- Processes a wide range of textiles, non-wovens, films, and papers
- Cuts materials up to 2" thick (slitting)
- Handles roll widths up to 104" (slitting & rerolling)

### ADVANCED CAPABILITIES:

- Nesting for material optimization
- Slitting and rerolling with tight tolerances (+/- 1.5mm)
- Duplex slitting for thin films and paper



## Benefits

- ✓ Reduced Waste: Optimizes material usage through CAD systems and nesting
- ✓ Cost Savings: Eliminates tooling costs with program cutting
- ✓ Faster Production: High-speed computer-guided technology
- ✓ Increased Efficiency: Multi-ply cutting and slitting capabilities
- ✓ Improved Quality: Precision cutting for consistent results
- ✓ Customizable Solutions: Tailored products to meet specific needs
- ✓ Streamlined Logistics: Co-packing, warehousing, and drop shipping services
- ✓ Simplified Process: Expert technicians assist with material selection and configuration

## Materials & Equipment

### Materials

- |            |                |           |                     |
|------------|----------------|-----------|---------------------|
| ⚙ PET      | ⚙ EPDM         | ⚙ Vinyl   | ⚙ Foam              |
| ⚙ Woven PP | ⚙ Spun PET     | ⚙ Leather | ⚙ Non-Wovens        |
| ⚙ HDPE     | ⚙ Woven Screen | ⚙ Scrim   | ⚙ Specialty Fabrics |
| ⚙ Paper    | ⚙ Polyester    | ⚙ Kevlar  |                     |

### Key Equipment



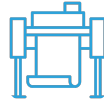


## Key Capabilities



### Program Cutting

- Gerber and Pathfinder cutters
- Material widths up to 90" wide
- Textile layers up to 1.5 "
- Computer guided technology
- Drilled holes 1mm-6mm
- Tension free spreader of textiles
- Easy Cut program modifications
- No tooling required
- Process a wide range of textiles



### Die-Cutting

- Traveling head die cut press
- Multi-ply cutting capability
- 39" X 39" cutting head
- Material width up to 78"
- Steel rule dies
- Nesting capabilities



### Converting

- Material widths to 70"
- Cut part size up to 70" X 50"
- Steel rule dies
- Multi-ply material cutting



### Slitting

- Processes material up to 2" thickness
- Utilizes air score slitter knives
- Heavy duty unwind capability
- Processes material on 3" cores
- Roll width to 60"



### Slitting & Rerolling

- Wovens, non-wovens, vinyls, carpet, screen, and plastic mesh
- Roll widths up to 104"
- Roll diameters up to 53"
- Core sizes 2"-6" on the unwind
- Core sizes 2"-3" on roll put ups
- Cut tolerances +/- 1.5mm



### Duplex Slitting

- Unwind diameter up to 55"
- Unwind core size range 3"-7"
- Unwind roll weight up to 4000 lbs
- Rewind diameter up to 31.5"
- Rewind core sizes 2" & 3"
- Cut widths - 1" min.
- Material: .001 - .010 in thick film (PP, PET, PE), .007 - .017 in thick paper

## Key Markets



### Automotive



### Industrial

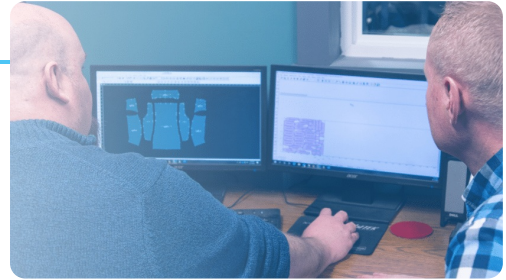




## PRODUCT DEVELOPMENT

*From Design to the Assembly Line, We've Got You Covered.*

Your business can count on Fairway's highly-skilled team to execute even the most complicated textile needs. Fairway's process solutions are skillfully developed by our textile experts to maximize yields providing for better products produced faster.



When you come to us with a project in mind, we'll collaborate with you to create a more manufacturable design that often optimizes your supply chain.

Reduce your soft goods manufacturing costs and time. Contact us for a FREE engineering consultation; click the button below to get started.

## The Power of Fairway

Discover the driving force behind our innovative solutions. With decades of experience and a relentless pursuit of excellence, Fairway Products has become a trusted partner to industries worldwide. Our commitment to precision, quality, and customer satisfaction is the foundation upon which we build enduring relationships.

## Applications

### MEDICAL & HYGIENE

Development of disposable surgical gowns, drapes, and masks; creation of wound care dressings and filtration systems for medical equipment.

### SEATING & SEAT COVERS

Design and production of transportation seating and interior components. From automotive to buses to airplanes and everything between.

### INDUSTRIAL MANUFACTURING

Creation of industrial filtration systems for HVAC systems, dust collection, and liquid filtration; development of protective apparel for industrial workers.

## Features

- ✓ Expert team for complex textile needs
- ✓ Process solutions for less product loss
- ✓ Design skills for faster and better product creation
- ✓ Highly-effective and efficient technology
- ✓ Material selection and size optimization
- ✓ Efficient product creation process
- ✓ Thorough product review before prototyping
- ✓ Commitment to process efficiency and affordability



### Benefits

- ✓ Reduced product development time
- ✓ Improved product quality and performance
- ✓ Cost reduction through process optimization
- ✓ Access to cutting-edge materials and technologies
- ✓ Compliance with industry regulations
- ✓ Enhanced product innovation
- ✓ Increased market competitiveness



#### Innovation

Our experts join forces to determine the best materials, layout, size, etc. to make the best product for your needs.



#### Design

Our engineers determine the most efficient way we can make your product while maintaining high-quality results.



#### Development

We have invested in highly effective and efficient technology to make products better, faster, and for an affordable price.

### We Start with the Fundamentals



Our expert employees have the skills and the experience to take even the most basic napkin sketch of an idea and transform it into a product you'll love. When you come to us with a project, the first thing we'll do is go through the vetting process. Then, our top experts determine the best raw materials for the product based on our extended experience to determine the most efficient process.

### Key Markets



#### Textiles



#### Manufacturing Plants



## Precision Cutting, Endless Possibilities

### *Transform Your Materials with Our Expert Slitting and Rerolling Services*

Fairway Products has been a leader in slitting and rerolling materials since 1951. Our parent company, Acme Mills, has over 100 years of experience in producing high-quality fabrics.

When you need slitting and rewinding, you can count on fast turnaround times and narrow width capabilities. We also have stocking options that can help you save time. Plus, by leveraging Acme Mills' buying power, you can often get materials at better prices.

With our extensive network of suppliers, we can handle a wide range of materials, including woven fabrics, knits, paper, films, adhesives, and non-wovens. We offer specialized services like non-woven textile slitting services and paper and pulp roll slitting services to meet your exact needs.

Your product can be optimized and re-invented with our help.



## The Power of Fairway

Unlock the full potential of your materials with precision slitting and rerolling. Whether you need narrow widths or high-quality custom products, we have the equipment and expertise to deliver. When you choose Fairway Products, you get high precision and efficiency for industries like automotive and filtration. You can also take advantage of our slitting services for adhesives and films, ensuring your materials are transformed to the highest standards. If you're looking for high-performance filtration pads or needle-free fabric bonding, our services are designed to meet your needs and exceed expectations. Experience how Fairway Products can help elevate your manufacturing process.





### Applications

#### SEATING & SEAT COVERS

Seat covers, headliners, carpets, insulation, sealing tapes

#### AGRICULTURE

Crop covers, mulch films, geotextiles

#### MEDICAL & HYGIENE

Surgical drapes, gowns, masks, wound care products

#### FILTRATION

Air filters, liquid filters, industrial filtration media

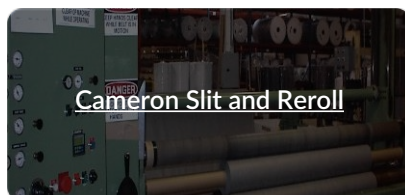
### Features

- ★ Up to 104" wide roll, maximum diameter 53"
- ★ Tolerances +/- 1.5mm
- ★ Drop blade slitting units for goods up to 120" wide.
- ★ Narrow widths down to 1.00"
- ★ Core sizes 2" – 6", slit cores 2" and 3"
- ★ Programmable Stop capability. (Yards per roll)
- ★ Variable speed drives.

### Benefits

- ✓ Quick turnaround time
- ✓ Stocking capabilities
- ✓ Material sourcing at competitive prices
- ✓ Wide variety of materials processed (wovens, knits, paper, films, adhesives, non-wovens)

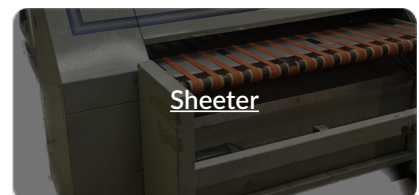
### Key Equipment



Cameron Slit and Reroll



Dri-Tec Duplex Slitter



Sheeter



## Slitting and Rerolling Capabilities

### Non-Wovens

- Spunbond fabrics
- Pointbond fabrics
- Meltblown fabrics
- Lofted media
- Needle punched felts
- Hydroentangled fabrics
- Spunbond Polyester Filter Media
- Spunlace Polyester Filter Media
- Spunbond Polypropylene Filter Media
- SMS Polypropylene Filter Media
- Meltblown Polypropylene Filter Media
- Composite Fabrics Filter Media
- Rayon Filter Media
- Polyester Blend Filter Media
- Sonic Bonded Composites
- Layered Polyester
- Wet-Laid Cellulose
- Chem-Bond Rayon
- Layered Polypropylene
- Power-Flo Depth Media

### Wovens

- Nylon
- Meshes
- Wearables
- Polyester

### PAPER & Advanced Material

- Chromatography Paper
- Electrophoresis Paper
- Blotting Paper
- Food and Lab Grade Paper
- Film

### Key Markets



**Automotive**



**Aerospace**



**Textiles**



## Materials & Equipment

### Specifications

- ⚙️ **Cameron Slitter #1:** 94 inch capacity, maximum roll diameter 53 inches, core size unwind 2 to 6 inches, core size rewind 2 and 3 inches, tolerances +/- 1.5mm, solid shaft backstand, variable speed drive.
- ⚙️ **Cameron #2:** 94 inch capacity, maximum roll diameter 43 inches, core size unwind 1.5 to 8 inches, core size rewind 2 and 3 inches, tolerances +/- 1.5mm, shaftless backstand (uses chucks), variable speed drive.
- ⚙️ **Shanks/Cameron #3:** 104 inch capacity, maximum roll diameter 53 inches, core size unwind 2 to 6 inches, core size rewind 2 and 3 inches, tolerances +/- 1.5mm, solid shaft backstand, variable speed drive, programmable stop capability for yards per roll.
- ⚙️ **Collins Drop Blade Cutter/Slicer:** maximum roll 120 inches, maximum diameter roll up to 25 inches, core size 2 and 3 inches usable, tolerance +/- 1.5mm on most materials, variable blade packs (serrated and straight).
- ⚙️ **Judleson/Dusenbury Slicer:** maximum roll 60 inches, maximum roll diameter 12 inches, must use 2.125 inch ID special slitter cores, slitting yield minimum width 12mm, maximum width 1 inch (subject to material slit), max yield 58 inches (requires clamp space on roll).

### Materials

- |                           |  |                             |
|---------------------------|--|-----------------------------|
| ⚙️ Wovens                 | ⚙️ Spunbond polyester filter media       | ⚙️ Layered polypropylene    |
| ⚙️ Knits                  | ⚙️ Spunlace polyester filter media       | ⚙️ Power-flo depth media    |
| ⚙️ Paper                  | ⚙️ Spunbond polypropylene filter media   | ⚙️ Nylon                    |
| ⚙️ Films                  | ⚙️ SMS polypropylene filter media        | ⚙️ Meshes                   |
| ⚙️ Adhesives              | ⚙️ Meltblown polypropylene filter media  | ⚙️ Wearables                |
| ⚙️ Non-wovens             | ⚙️ Composite fabrics filter media-wovens | ⚙️ Polyester                |
| ⚙️ Spunbond fabrics       | ⚙️ Rayon filter media                    | ⚙️ Chromatography Paper     |
| ⚙️ Pointbond fabrics      | ⚙️ Polyester blend filter media          | ⚙️ Electrophoresis Paper    |
| ⚙️ Meltblown fabrics      | ⚙️ Sonic bonded composites               | ⚙️ Blotting paper           |
| ⚙️ Lofted media           | ⚙️ Layered polyester                     | ⚙️ Food and lab grade paper |
| ⚙️ Needle punched felts   | ⚙️ Wet-laid cellulose                    |                             |
| ⚙️ Hydroentangled fabrics | ⚙️ Chem-bond rayon                       |                             |

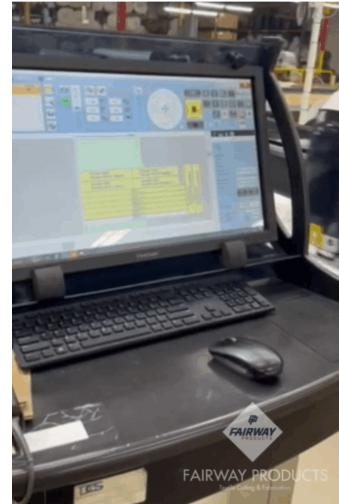




## Program Cutting – Pathfinder CNC

### Key Capabilities

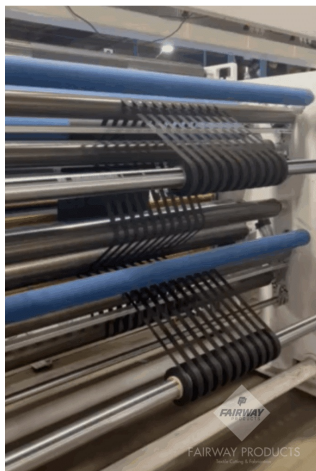
- Material widths up to 90" wide can be converted
- Process a wide range of textiles
- Cuts textile layers up to 1.5"
- Computer guided technology ensures precise cuts
- Drilled holes 1mm-6mm
- Tension free spreader of textiles
- Easy Cut program modifications
- No tooling required



### Applications

- |            |             |                       |
|------------|-------------|-----------------------|
| • PET      | • Polyester | • Spun PET            |
| • Woven PP | • Vinyl     | • Woven Screen        |
| • HDPE     | • Leather   | • No tooling required |
| • Paper    | • Scrim     | • Foam                |
| • EPDM     | • Kevlar    |                       |

## Dri-Tec Duplex Slitter



### Key Capabilities

- Unwind diameter up to 55"
- Unwind core size range 3" – 7"
- Unwind roll weight up to 4,000 lbs
- Rewind diameter up to 31.5"
- Rewind core sizes 2" & 3"
- Cut widths- 1" min.
- Material: .001-.010-inch-thick film (PP, PET, PE), .007 – .017-inch-thick paper



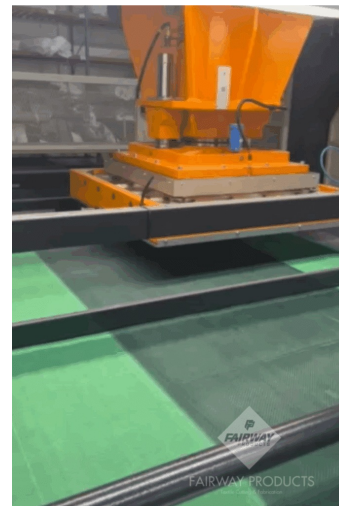
### Applications

- ❁ PET
- ❁ Woven PP
- ❁ HDPE
- ❁ Paper
- ❁ EPDM
- ❁ Polyester
- ❁ Vinyl
- ❁ Leather
- ❁ Scrim
- ❁ Kevlar
- ❁ Spun PET
- ❁ Woven Screen
- ❁ No tooling required
- ❁ Foam

### Atom Press

#### Key Capabilities

- ❁ Traveling head die cut press
- ❁ Multi-ply cutting capability
- ❁ 39" x 39" cutting head
- ❁ Material width up to 78" can be converted
- ❁ Steel rule dies used for precision cutting
- ❁ Nesting capabilities for ultimate material utilization



### Applications

- ❁ PET
- ❁ Woven PP
- ❁ HDPE
- ❁ Paper
- ❁ EPDM
- ❁ Polyester
- ❁ Vinyl
- ❁ Leather
- ❁ Scrim
- ❁ Kevlar
- ❁ Spun PET
- ❁ Woven Screen
- ❁ Foam



### Sheridan Press

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#### Key Capabilities

- ⚙ Material widths to 70" can be converted
- ⚙ Cut part size up to 70" x 50"
- ⚙ Steel rule dies used for precision cutting
- ⚙ Multi-ply material cutting

#### Applications

- |            |             |                |
|------------|-------------|----------------|
| ⚙ PET      | ⚙ Polyester | ⚙ Spun PET     |
| ⚙ Woven PP | ⚙ Vinyl     | ⚙ Woven Screen |
| ⚙ HDPE     | ⚙ Leather   | ⚙ Foam         |
| ⚙ Paper    | ⚙ Scrim     |                |
| ⚙ EPDM     | ⚙ Kevlar    |                |

### Sheeter

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#### Key Capabilities

- ⚙ Process material up to 2" thickness
- ⚙ Utilize air score slit knives
- ⚙ Heavy duty unwind capability
- ⚙ Processes material on 3" cores
- ⚙ Roll width to 60"

#### Applications

- ⚙ Paper
- ⚙ Non-Wovens
- ⚙ Specialty Fabrics







## Cameron Slit and Reroll



### Key Capabilities

- Roll widths up to 104"
- Roll diameters up to 53"
- Core sizes 2" – 6" on the unwind
- Core sizes 2" – 3" on roll put ups
- Cut tolerances +/- 1.5mm

### Applications

- |            |                |           |
|------------|----------------|-----------|
| • PET      | • Spun PET     | • Vinyl   |
| • Woven PP | • Woven Screen | • Leather |
| • Paper    | • Polyester    | • Scrim   |

## Industrial Sew – Juki and Mitsubishi Machines

### Key Capabilities

- |  |   |
|--|---|
| • Single needle sewing                 | • Array of custom attachments for folding and binding |
| • Double needle sewing                 | • Tubing  |
| • Serging                              | • Zig zag capabilities                                |
| • Walking foot and needle feed options | • Complex shapes and patterns                         |
| • Cylinder arm                         | • Repeatable sew patterns                             |
| • Programmable sewing                  |   |
| • Capable of sewing heavy textiles     |   |





### Applications

- Leather
- Vinyl
- Felt
- Nonwovens
- Light Plastics

### Fabric Welding – Sonobond and Miller Weldmaster Machines



#### Key Capabilities

- Ultra sonic welding of nonwoven materials for custom sealed edges
- Heat and pressure welding of vinyls and nonwovens

#### Applications

- Polyester
- Polypropylene Nonwovens

### Hot and Cold Cutters

#### Key Capabilities

- Cutting widths to 18"
- Cutting tolerance to 1mm
- Heat cutting to eliminate fraying
- Cold cutting for heat sensitive materials

#### Applications

- Hook and loop tapes
- Plastic retainers
- Webbings
- Elastics





### Snaps and Grommets

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#### Key Capabilities

- ⚙️ Grommet and snap attachments
- ⚙️ Can run various size die sets for grommet sizes

#### Applications

- ⚙️ Grommets and snaps of various sizes

### Clicker Press

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#### Key Capabilities

- ⚙️ Multi ply cutting
- ⚙️ Manual nesting
- ⚙️ Gasket cutting
- ⚙️ Filter disc cutting
- ⚙️ Small die sizes
- ⚙️ Ideal for:
- ⚙️ Small production runs
- ⚙️ Custom applications
- ⚙️ Leather cutting

#### Applications

- ⚙️ Custom
- ⚙️ Gasket
- ⚙️ Leather
- ⚙️ Filter Disc










## Stitching Success Through Fusion: How Fairway Products Seamlessly Transformed an Airport Windsocks Company

**Summary:** Fairway Products provided an innovative solution for an airport windsocks company struggling with inefficient sewing methods and staffing issues. By utilizing our heat and pressure fusion technology, we greatly reduced production time and cut manufacturing costs, delivering an end product that met all industry standards. The partnership was so successful that it led to a long-term contract between the two companies.



### Project Specifications

-  **Industry:** Aerospace
-  **Category:** Process Optimization & Product Redesign
-  **Processes:** Textile Fusing, Process Engineering

### Challenges and Solutions

The windsocks company faced challenges with their traditional manufacturing process, which involved sewing pieces of material together using needle and thread. This method was not only time-consuming but also heavily dependent on maintaining a stable sewing staff, which had become increasingly difficult. Recognizing an opportunity to improve both manpower efficiency and production speed, Fairway Products proposed an advanced fusion method that uses heat and pressure to bond textile materials.

### Uses and Applications

The windsocks produced using the fusion method are essential for indicating wind speed and direction on airport runways. By transitioning from sewing to fusion technology, the company not only achieved faster production times but also produced a more durable and aesthetically pleasing product, maintaining compliance with all industry standards. The applications for this innovative windsock product remain critical across various airport and aviation operations, where reliable wind indicators are necessary for safety and efficiency.

### Impact of the Project

The implementation of Fairway Products' heat and pressure fusion technology led to a significant reduction in production time and manufacturing costs. The enhanced efficiency and the high quality of the finished windsocks led the windsock company to enter into a long-term contract with Fairway Products. This partnership positioned Fairway Products as a trusted partner for textile engineering and process optimization within the aerospace industry.



## Manufacturing Process

### MATERIAL SELECTION

Appropriate textile materials were selected to withstand the rigors of airport environments, ensuring durability and functionality.



### HEAT AND PRESSURE FUSION

The fusion process replaced traditional sewing, bonding the textiles together without the need for thread, enhancing the structural integrity of the windsocks.



### QUALITY ASSURANCE

The windsocks underwent a series of quality checks to ensure they met all required industry standards, focusing on durability, aesthetic quality, and functional performance.



## Client Benefits

By collaborating with Fairway Products, the windsocks company was able to overcome their manufacturing challenges related to labor dependency and inefficiency. The adoption of advanced fusion technology not only cut down costs but also streamlined their production processes, allowing them to meet growing market demands without compromising on quality.

## Certifications

Fairway Products maintains ISO 9001:2015 certification, demonstrating a commitment to quality management and continuous improvement, which further validated their capability to deliver innovative manufacturing solutions.

## Conclusion

Fairway Products' expertise in textile fusion and process engineering, coupled with their dedication to quality and efficiency, made them the ideal partner for this windsocks project. The successful transformation of the manufacturing process not only solved the client's immediate challenges but also set the foundation for a long-term strategic partnership, showcasing Fairway Products' ability to innovate and lead in the aerospace manufacturing sector.



## Transforming Semi-Truck Seat Covers: Fairway Products Partners with Isringhausen to Enhance Automotive Seating Solutions

**Summary:** When Isringhausen, a multi-national leader in automotive and commercial seating, sought to improve their semi-truck seat covers, they turned to Fairway Products for innovative solutions. Fairway's team successfully reverse-engineered the existing product, developing a seat cover with superior materials, improved patterns, and enhanced durability. Leveraging state-of-the-art technology, Fairway Products ideated, designed, cut, sewed, and produced the seat covers, delivering an assembly line-ready product that exceeded expectations.



### Project Specifications

- Material:** Polyester knit backing foam laminated with vinyl, optimized for durability and comfort
- Manufacturing Techniques:** Reverse engineering, die cutting, sewing, RF welding, sonic welding
- Dimensions:** Custom shapes and sizes tailored to semi-truck seating requirements
- Durability:** Designed to withstand the rigors of daily use in commercial vehicles
- Safety Compliance:** Meets all industry safety standards for automotive seating

### Uses and Applications

The custom seat covers produced by Fairway Products are essential for enhancing comfort and durability in a variety of commercial vehicles. Specifically designed for Isringhausen's semi-truck seating, these covers are also adaptable for other automotive and commercial seating applications, including:

- Public buses
- Trains
- Trucks
- Motor coaches
- Military Vehicles





## Scalability of the Project

The collaboration with Isringhausen began with a prototype phase, where Fairway Products worked closely with the client to refine the seat cover design. After successful prototyping and testing, the project scaled up to meet the production demands of Isringhausen's global market. Fairway's advanced manufacturing capabilities ensured that the seat covers were produced efficiently, maintaining consistent quality across all units.

## Manufacturing Process

### REVERSE ENGINEERING

Fairway Products began by reverse engineering Isringhausen's existing seat cover to understand its construction and identify areas for improvement.



### MATERIAL SELECTION

The team selected premium materials, including a polyester knit backing foam laminated with vinyl, to enhance comfort and durability.



### DIE-CUTTING AND SEWING

Precise die-cutting techniques were employed to create custom shapes, followed by expert sewing to assemble the seat covers with reinforced seams.



### WELDING AND ASSEMBLY

RF welding and sonic welding techniques were used to ensure the structural integrity of the covers. The final products were assembled, ready for integration into semi-truck seating.



## Quality Control Steps

Fairway Products implemented rigorous quality control measures throughout the production process to ensure the highest standards were met:

- ➔ **Material Inspection:** Thorough inspections of all materials were conducted before cutting.
- ➔ **Cutting and Sewing Precision:** Die-cutting and sewing processes were continuously monitored and adjusted to maintain accuracy and durability.
- ➔ **Welding Quality:** Each welded component underwent strict inspection to ensure strong and reliable joints.
- ➔ **Final Inspection:** The finished seat covers were subjected to a comprehensive final inspection to confirm they met Isringhausen's specifications and safety requirements.



## **Client Benefits**

By partnering with Fairway Products, Isringhausen gained access to superior product development and manufacturing capabilities. Fairway's ability to reverse engineer and improve existing designs allowed Isringhausen to offer a better product to their customers. Additionally, Fairway's efficient production processes and supply chain management ensured that Isringhausen could meet market demands on time and with consistent quality.

## **Certifications**

Fairway Products proudly maintains ISO 9001:2015 certification, demonstrating their commitment to quality management and continuous improvement.

## **Conclusion**

Fairway Products' expertise in reverse engineering, material selection, and advanced manufacturing processes made them the ideal partner for Isringhausen's semi-truck seat cover project. The successful collaboration not only enhanced the quality of Isringhausen's seat covers but also reinforced Fairway Products' reputation as a reliable provider of automotive and commercial seating solutions.



## Precision Die-Cut Parts for Recreational Vehicles: Fairway Products Enhances Production for a Leading Mobile Living Solutions Company

**Summary:** Fairway Products stepped in to offer a holistic solution in producing die-cut parts for recreational vehicles. We not only expertly die-cut screens for RV ceiling vents but also took over the heat-staking process, delivering assembly-line-ready components. Our advanced technology streamlined our client's production process, fortifying a long-term partnership in the field of mobile living solutions.



### Project Specifications

- Industry:** Automotive & Recreational Vehicles
- Category:** Production Optimization & Long-Term Partnership
- Processes:** Die-Cutting, Heat-Staking, Assembly Line Component Production

### Uses and Applications

In the niche world of mobile living solutions, the quality and precision of die-cut parts for recreational vehicles can make all the difference. A leading company in mobile living sought out Fairway Products for a specialized die-cut service to produce screens for RV ceiling vents. However, upon discovering the company's manual heat-staking process for attaching the screens to plastic frames, Fairway Products saw an opportunity to add more value to the project.

### Manufacturing Process

#### DIE-CUTTING

Precision die-cutting technology was employed to create exact screen dimensions for RV ceiling vents.

#### HEAT-STAKING

Advanced heat-staking equipment was used to attach screens to plastic frames, replacing the client's manual process.

#### ASSEMBLY LINE COMPONENT PRODUCTION

The final product was prepared as assembly-line-ready components, minimizing additional processing for the client.





## Scalability of the Project

Fairway Products utilized its high-tech die-cutting capabilities not only to cut the screens but also to manage the heat-staking process. This approach enabled the company to deliver assembly-line-ready components, significantly streamlining the client's production process. The successful expansion of services showcased Fairway Products as a comprehensive provider for die-cut parts in the recreational vehicle market, reinforcing a long-term partnership with the mobile living company.

## Quality Control Steps

To ensure the highest quality in every step of the production process, Fairway Products implemented stringent quality control measures:

- ⚙️ **Die-Cutting Precision:** Monitored and adjusted to maintain exact specifications.
- ⚙️ **Heat-Staking Quality:** Each component underwent a thorough inspection to ensure strong and consistent bonding.
- ⚙️ **Final Inspection:** All finished components were subjected to a comprehensive quality check to meet the client's specifications and performance requirements.

## Client Benefits

By collaborating with Fairway Products, the client gained significant productivity advantages through streamlined processes and high-quality assembly-ready components. This optimization allowed the client to focus on other crucial aspects of their production line, enhancing overall efficiency and output in the competitive mobile living solutions market.

## Conclusion

Fairway Products' ability to combine die-cutting and heat-staking services with a focus on precision and quality made them the ideal partner for this project. The successful collaboration not only optimized the client's production process but also strengthened the partnership, positioning Fairway Products as a trusted provider of high-quality die-cut parts for recreational vehicles.