



Die-Cut Solutions for **SKIN CONTACT & WEARABLE MEDICAL APPLICATIONS**

Working with materials that stick to the human body requires special knowledge and consideration. Marian is a global leader in converting thin, flexible materials to intricate, multi-layer laminations for wearable medical devices, health and beauty applications, advanced wound care, and more. Our custom die cutting and converting capabilities, global footprint, and unmatched capacities enable us to manufacture the highest quality components.

From proof of concept to mass production and final packaging, we'll work closely with you through each project phase to ensure access to the highest quality materials, a wide variety of custom converting and manufacturing capabilities including cleanroom converting and packaging capabilities, and engineering expertise.

marianinc.com | medicalsales@marianinc.com



Solutions for SKIN CONTACT APPLICATIONS

Marian provides a turnkey process for skin contact and wearable medical device applications. Our custom converting capabilities provide solutions for a wide assortment of applications that are worn by patients in both clinical environments or their homes. We convert materials that both stick to the human body or are crucial to proper device function.

WEARABLES & DIAGNOSTICS



- Health monitors
- Electrode pads
- Glucose monitoring
- Wearable sensors
- Security/ID device

ADVANCED WOUND CARE



- Wound dressings
- Device fixation
- Ostomy care
- IV dressings
- Composite dressings

HEALTH & BEAUTY



- Cosmeceutical pads
- Anti-wrinkle pads
- Wart removal products
- Under-eye pads

OVER THE COUNTER & RETAIL



- OTC bandages
- Scar therapy (patches, serums, etc.)
- At-home suture kits

TRAUMA CARE & PRE HOSPITAL



- Wound seals & vents
- Trauma kit components
- Device fixation
- Occlusive dressings
- IV dressings

Along with custom converting, Marian also has packaging capabilities like:

- Automated cartoning
- Pouches: barrier, heat-seal, cold-seal
- Thermoform packaging
- Blister & clamshell packaging
- Printing & labeling
- Product assembly (kitting)

MATERIALS



Marian works closely with and has preferred status with the world's top manufacturers of thin, flexible skin-contact and other materials. Our Sales Engineers also complete extensive training to help you choose the best materials for your application.

MANUFACTURING



Once design and materials are finalized, we'll devise the most efficient, cost effective, and high-quality process to manufacture your parts with your application in mind. We'll also add any customer specific requirements like cleanroom converting, 100% inspection, and packaging as necessary.

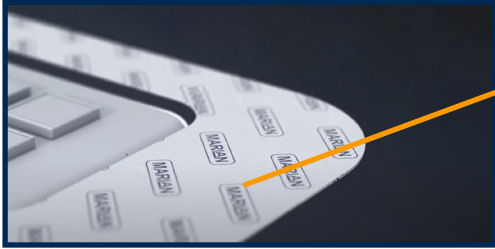
QUALITY & CERTIFICATIONS



Marian heavily invests in obtaining and maintaining relevant quality certifications for the medical & wearable industries like:

ISO 9001
ISO 13485
ISO 14001
FDA Registered
cGMP

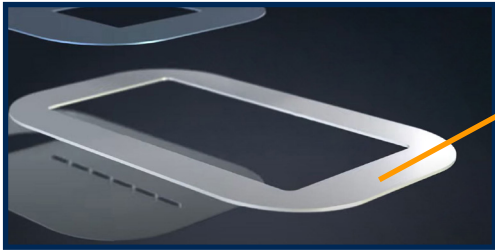
Solutions for WEARABLE MEDICAL DEVICES



1 PRINTED COVERS

Printed covers help distinguish your product and offer additional customization.

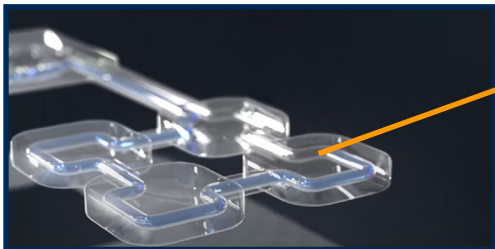
- Key materials: Films, foams and foam tapes, non-wovens, fabrics, etc.
- Key suppliers: Avery®, Adhesive Research®, DermaMed, Solventum, Flextech, MacTac®, Sekisui



2 SEALS & GASKETS

Custom seals and gaskets provide long-term sealing to protect internal components.

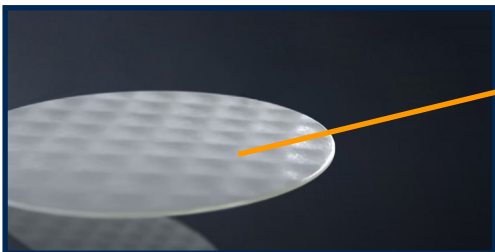
- Key materials: PORON®, VHB foam tapes, rubber, etc.
- Key suppliers: Rogers Corporation®, 3M™, tesa®



3 MICROFLUIDICS

Microfluidic materials help draw liquids to or from desired areas of a wearable device.

- Key material types: Multi-layered films with hydrophilic coatings, silicones, acrylics, etc.
- Key suppliers: Solventum, Cytiva



4 VENTS & MEMBRANES

Porous films, membranes, and vents to facilitate sample flow in a device

- Key materials: PES, Porex, mesh, PTFE
- Key suppliers: Porex®, Cytiva, Saati, Sefar



5 INSULATORS & CONDUCTORS

Insulators and conductors help conduct electrical current, dissipate heat, etc.

- Key materials: Thermal, heat-dissipative, conductive materials, hydrogels, foils, etc.
- Key suppliers: Polymer Science, 3M™, Morgan, Axelgaard, ITW, Flexcon



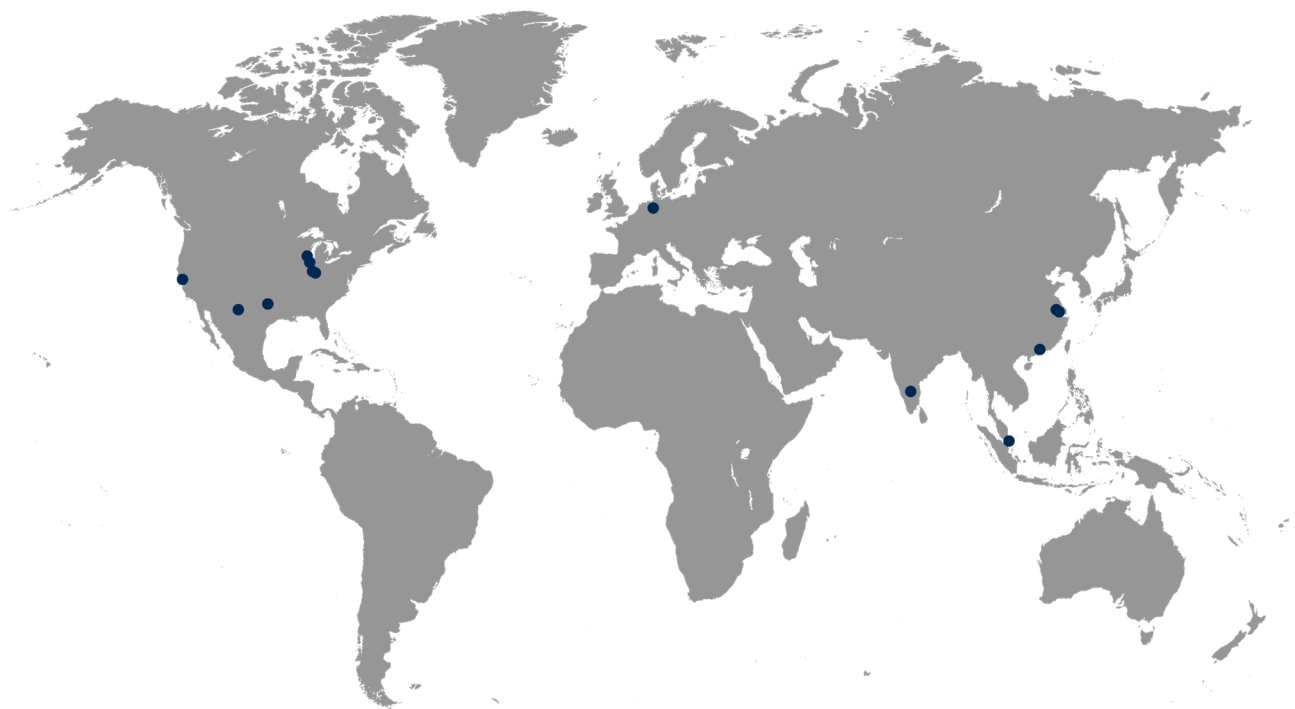
6 SKIN ATTACHMENTS / ADHESIVES

Skin contact materials adhere the device to the body. Material options differ based on user demographics, wear-time, skin preparation, etc.

- Key materials: acrylic, soft silicone gel, hydrogel, hydrocolloids, etc.
- Key suppliers: Avery®, Berry Global, DermaMed, Solventum, Cardinal™, Polymer Science, Amparo



Marian is a global leader in providing precision die-cut component parts for customers in the consumer electronics, automotive, and medical industries. With over 1,000,000 square feet of production space worldwide and state-of-the-art manufacturing technologies, Marian engineers work closely with customers to solve complex manufacturing and assembly problems. Marian's responsive approach, in-depth material knowledge, innovative manufacturing capabilities, and high standards for quality all add up to provide you with the best component solutions in the industry.



Chicago, IL, US
630-293-7800

Indianapolis, IN, US (Headquarters)
800-773-0062

Singapore
65-6481-0633

Milwaukee, WI, US
414-672-3000

Monticello, IN, US (Medical)
800-773-0062

Suzhou, China
86-512-6283-3438

El Paso, TX, US
915-591-8558

Bay Area, CA, US (Sales/Engineering)
800-773-0062

Shenzhen, China
86-755-2967-0073

Fort Worth, TX, US
817-332-6151

Bremen, Germany
49-4241-80264-00

Bangalore, India

marianinc.com | medicalsales@marianinc.com

