

BOYD

CORPORATION

WWW.BOYDCORP.COM

MEDICAL SOLUTIONS

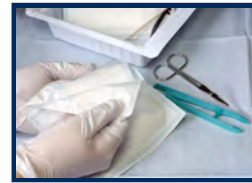


One Company, Many Solutions

Medical Converting Solutions

Boyd is an innovative precision converter with extensive experience in the Medical Industry ranging from technical IVD products to disposables, hygienic applications and cosmetic products.

We turn concepts into components. From design to manufacturing to packaging and logistics, Boyd provides full-service solutions that transform your innovative ideas into reality.



Product Development Assistance

Boyd's product development assistance unifies industrial design, engineering and manufacturing to accelerate your time to market. To ensure success, cross-functional teams are assembled from mechanical design, sourcing, manufacturing engineering, quality and production to meet your specific manufacturing challenges. Recognizing that cost and time savings are key to your success, Boyd enhances your product development process from initial investigation through final production.

Quick-Turn Prototyping

Today's marketplace demands compressed product development cycles and swift results. Boyd integrates global access to materials with quick-turn prototyping techniques to accelerate prototype delivery. Same or next day samples often achievable.

Medical O-Rings & Gaskets

Boyd offers a variety of thermal materials and sealing solutions used in non-invasive medical products and devices. Our elastomers are formulated to comply with FDA 21 CFR 177.2600, USP Class VI, NSF 61, and other medical and industrial grade specifications.



Medical Wearables
Transdermal Applications
Wound Closure & Dressing Electrodes
Diagnosis Strips
Hydrogel Dressings
Fashion Tape



Surgical Face Shields
I.V. Dressings / Securements
Pulse Oximetry Tape
Pads for Tracheostoma
Nasal Strips



Island Dressings
Iontophoresis
Microplate Lidding
Microfluidic Devices
Packaging & Kitting Solutions
IVD Components



Energy Management Solutions
Wovens / Nonwovens
Advanced Wound Care
Grounding Electrodes
Negative Pressure Wound Therapy
Medical Filters, Gaskets & Sealing Solutions

Medical Thermal Solutions

Aavid, Thermal Division of Boyd Corporation, provides solutions and services, utilizing both traditional cooling solutions and breakthrough technologies ranging from standard heat sinks to fully custom two phase or liquid systems.

Aavid meets thermal management challenges with solutions that enable densely packed electro/optical-instruments to meet high performance objectives.



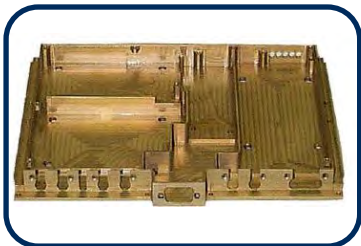
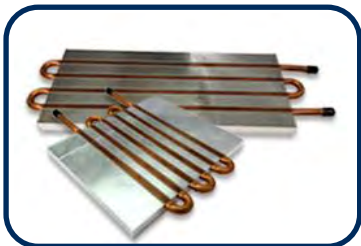
Applications

- Ablation Devices
- Bioanalysis
- Bioconditioning
- DNA Analysis
- Electrosurgery
- Imaging Scanners
- Lasers & LEDs
- Interventional Medicine (Minimally Invasive)



Technologies

- Heat Pipe Assemblies
- Heat Spreader Plates
- Vapor Chamber Assemblies
- k-Core® (APG)
- Liquid Cold Plates
- Liquid Cooling Systems
- Heat Exchangers
- Intelligent Thermal Management Systems (iTMS)
- Advanced Metal Alloys



Managing Heat in Biomedical Devices

Selecting the proper technology improves performance and enables designers to achieve smaller package size, extend component life and meet touch temperature standards.

Passive Thermal Management Technologies

Passive components have no moving parts and do not require a power source. Optimized thermal management systems can reduce airflow requirements to improve filter efficiency, thus reducing the bioburden associated with pathogens that can pass through medical device cooling systems.

SOLIMIDE®

SOLIMIDE® Foams are a line of lightweight, fire resistant thermal and acoustic insulation polyimide foams. It is used in medical instruments to insulate the warm internals of the device and prevent the creation of hot-spots on the patient's skin, as well as, the equipment operator.



Medical Disposable, Device Components & Diagnostic Solutions You Can Count On

Boyd's fully integrated precision converting Medical capabilities are multi-faceted with ISO13485 Certified facilities in the US, Europe and Asia providing competitive solutions for virtually any Medical device. **Boyd offers total solutions** with deep material selection expertise, innovative manufacturing technologies and easy-to-integrate production parts with tight tolerances. Capabilities include rotary and flatbed precision converting, laser and water jet for quick turn prototyping, laminating, slitting, and subassembly work. Boyd can assist in selecting the most cost-effective material solutions while supporting the design of your solutions within the most comprehensive manufacturing and assembly operations in the industry. The result is reliable, consistent production execution at the highest quality.

Quality & Processing

Boyd's Medical production facilities are certified to ISO 9001 and ISO 13485 specifications - ensuring the highest levels of quality management. Boyd can provide part traceability information in-line with the demanding standards for the world's leading Medical OEM's.

Clean Room Capabilities

Boyd offers a variety of clean rooms ranging from Class 100 to Class 10K in our medical certified facilities with constant monitoring of critical parameters - ensuring you a high level of cleanliness for your sophisticated products. We convert and pack your products using numerous state-of-the-art manufacturing and assembly processes all within Boyd's clean room environments.

Global Capacity

With five production facilities strategically located around the world (North America, Europe and Asia) all certified to ISO 13485, Boyd is uniquely positioned to support your Medical needs. No matter where you are designing or developing Medical products around the world, Boyd is there to support. Boyd offers design assistance, clean room converting, immediate customer service, local warehousing, and just-in-time delivery and logistics services efficiently and in close proximity to your R&D and production location.

Boyd Medical Solutions Facilities

With over 85 years of customer-focused performance, Boyd Corporation has evolved as a market leader in engineered energy management solutions, wound care, disposables and various medical device solutions. All Boyd Medical facilities are certified to ISO 13485.

Boyd Corporation GmbH

Boyd Corporation GmbH processes, manufactures, provides customer service and design assistance for European Medical customers from our production facility in Syke, Germany. In addition to providing medical, IVD and cosmetic products, Boyd Corporation GmbH serves the electronics, mobile phone and automotive industries.



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Boyd California



Boyd California operations, closely located to the Silicon Valley in Modesto, California, provides design assistance, quick-turn prototyping, processing, manufacturing and customer service for North American Medical customers. In addition to providing energy management solutions to the Medical Device market, Boyd California has a long standing history in the electronics, aerospace, defense and industrial markets.

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Boyd Asia - Wuxi, China

Boyd Wuxi operations, located in Wuxi, China near Shanghai, provides Asia-Pacific customers as well as Global OEMs' R&D and production facilities, quick-turn prototyping, design assistance, precision converting and customer service. In addition to supporting our Medical customers within the region and around the world, the operation is also adept in mobile computing and consumer electronics.



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Boyd Tennessee



Boyd Tennessee operations, centrally located just north of Nashville Tennessee, has a long history of serving the broad disposable medical device industry. Boyd Tennessee provides a complete outsourcing solution, including - converting, assembly, packaging, and customer service out of its two ISO 13485 and FDA registered facilities.

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Boyd Thailand

Boyd Thailand operations, located in Chonburi, Thailand to the East of Bangkok, provides high precision stamping components, printed and blank labels, and high complexity precision converting parts for global customers in the medical device industry. Boyd Thailand has more than 2,000 sqm of clean room production areas in Class 100, 10K, to 100K.



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