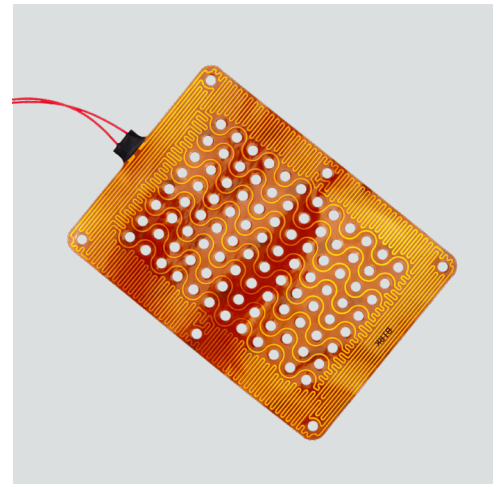
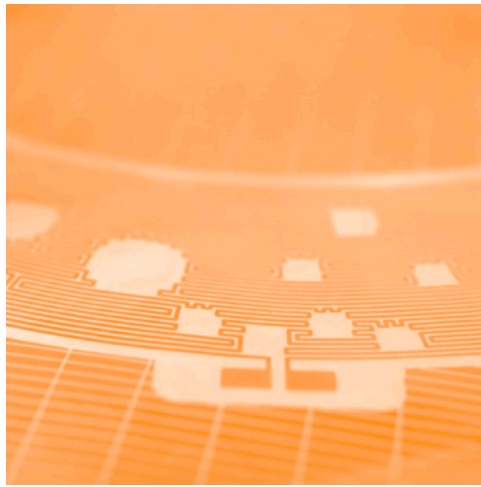


Birk Manufacturing, Inc.

# Medical Applications Guide

Thermal Solutions for Diagnostics, Instrumentation and Laboratory Applications



AS9100 | ISO 9001 | ISO 13485 | ITAR, UL and CSA Certified



**BIRK**

Engineering Thermal Solutions

# Expertise for Critical Applications

Birk Manufacturing specializes in flexible heaters and thermal solutions, ensuring optimal performance, reliability, and safety for critical healthcare applications.

## Key Features & Benefits

### Precision for Body Fluid Testing and Handling

Replicate body (or higher) temperatures for accurate body fluid testing, ensuring the reliability of medical diagnostic processes.

### Integration with Surgical Tools

Seamlessly merge heat and sensors into surgical tools, providing enhanced functionality and precision during medical procedures.

### Compact Design for Small Surface Areas

Perfectly sized for small surface areas with direct heat contact, optimizing the efficiency of heating in confined spaces. High resistance with compact design as low as .0025" thick.

### Lightweight with Fast Thermal Cycling

Swift and precise temperature control expedites critical medical processes and enhances overall efficiency in advanced diagnostics, such as PCR and DNA sequencing.

### Quality Assurance through Certifications

All products meet the highest industry standards, including ISO 13485, ISO 9001 and AS9100 and can be compliant with UL & CSA regulations. This commitment ensures the reliability and consistency vital for critical medical applications.

### Custom Complex Geometries

Create custom complex geometries, while providing total uniform coverage of intricate surface areas. This allows our heaters to adapt to the unique shapes and configurations of your medical devices, ensuring maximum efficiency and performance.



# Key Applications

## Blood Analyzers

Birk specializes in manufacturing heaters for reagent testing, seamlessly integrating Teflon®, metal tubing and machined parts. Choose from a wide array of temperature sensors, both standard and custom, precisely calibrated to align with your control systems.

## Hemostasis Management

Birk leads in developing heaters and sensors tailored to small surface areas with close contact around multiple points, essential for maintaining optimal conditions in devices used for blood clotting and coagulation studies. Rely on our commitment to provide precision and reliability for advancing diagnostic capabilities.

## Incubation

Count on Birk for reliable heat crucial for maintaining precise temperature conditions in incubators. Our heaters support the ideal environment for biological cultures within medical diagnostic equipment, ensuring top-notch incubation solutions.

## Surgical Tool Assembly

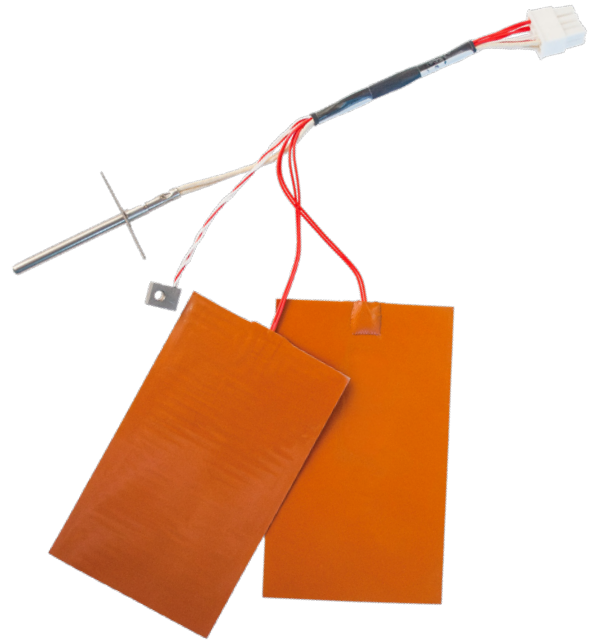
Our unique heaters with flex heater/flex circuit integration provide power and signal transmission through a single connection. Engineered for seamless integration with surgical tools, our heaters offer mechanical adhesion and reliability. Explore our range of heated probes for specific medical diagnostic needs.



## Medical Equipment Integration

- In-vitro diagnostics (IVD)
- Blood analyzers
- Incubators
- Coagulation analyzers
- Genetic analyzers for DNA sequencing
- Hematology analyzers
- Immunoassay analyzers
- Magnetic resonance imaging (MRI)
- Thermal Cyclers
- Evaporation and Condensation Control
- Mass Spectrometry
- Respirators
- Dialysers
- Chromatography Machines

Birk's engineering team is made up of highly dedicated, solution-based professionals and is available to discuss your application requirements. Our rich experience in over 1,000 medical applications allows us to offer expert support, quick prototyping and fully-customized flexible heaters for medical devices. In-house testing is available to verify compliance with medical industry standards.



Birk Manufacturing is dedicated to advancing healthcare through development of cutting-edge flexible heaters and thermal solutions. Together, let's create innovative solutions for the future of healthcare.



For more information visit [www.birkmfg.com](http://www.birkmfg.com)  
Call **860-739-4170**, or email [sales@birkmfg.com](mailto:sales@birkmfg.com)

Birk Manufacturing, Inc.  
14 Capitol Drive, East Lyme, CT 06333