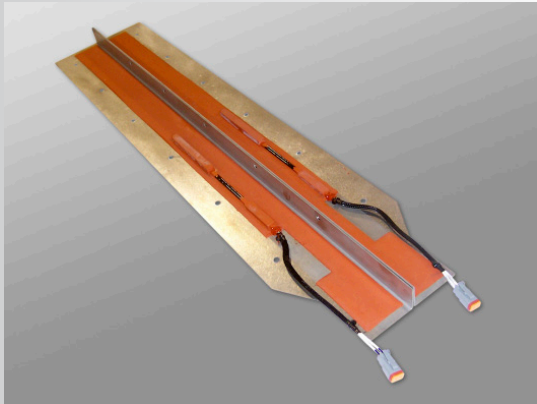


Thermal Systems for the Transportation Industry



Birk Heaters:

- **Vulcanized to your part to resist harsh weather**
- **All materials rated down to -40°C**
- **Silicone spray available for greater weather resistance**
- **Custom electrical and dielectrical testing available**

Innovating to Support Transportation Industry Leaders

Birk supplies heaters to transportation industry leaders. These heating systems keep operating parts within temperature specifications (when the ambient temperature is not) to help ensure system operation. Birk heaters are typically made of silicone rubber and optimized for each application. We provide complete assemblies, using a process that is managed entirely in-house, in order to give our customers plug-in capability of a more complete part. We provide mechanical attachment to machined parts. In-house testing is available to verify compliance with transportation industry standards. Some proven applications include:

— **Heated Thresholds for Railroad & Transit Systems**

Custom silicone heaters vulcanized to our customer's parts are used in harsh and heavy-use environments to provide better weather resistance. The unique heater/threshold system design has the ability to be self-regulating.

— **Exterior Door Guide Systems**

Birk develops innovative silicone heaters to fit door guides for railroad and transit systems. These systems are self-regulating to remove ice if it forms, keeping the doors opening and closing, thereby avoiding cold weather failure.

— **Fuel Cell Heaters**

Birk creates custom heater designs in both polyimide film and silicone to meet the unique operating requirements of fuel cells. Our advanced designs have varying watt densities available to evenly distribute heat while accommodating for heat loss.

— **Vehicle and Vessel Lighting**

We develop heaters to fit to the unique requirements of vehicle and shipboard lighting systems.

Custom Designs. Prototypes. Fast.

Birk specializes in "engineered solutions", not ordinary products you can get elsewhere. Our design team thrives on developing innovative approaches to complex problems. Our continuing implementation of Lean Processes allows us to deliver prototypes in days or weeks, where others quote months. Each thermal system is custom designed to meet the specific requirements of each integrated circuit under test.

What Can Birk Do For You?

For more information visit www.birkmfg.com, call 860.739.4170 or email sales@birkmfg.com.