

# T A C S - Brief

(*Technology Applications Case Study*)

## *IR boosts production of fiberglass curing . . .*

*When a manufacturer of bathroom fiberglass enclosures needed to increase the number of enclosures produced to meet a growing demand, they asked the Technology Applications Center for assistance.*

This Alabama Power customer manufactures fiberglass bathroom enclosures for new and existing residential markets. With housing starts up and remodeling activity high, getting more enclosures built became a priority. The production bottleneck was the preparation of the molds for the gel coat and the fiberglass overlay curing times. With the seasonal changes in Alabama, everyday seemed to be a different day when it came to the environmental conditions for production within the plant. From too much humidity to too cold in the winter. What was needed was a little heat to bring some consistency to the molding process. The question as to what kind of heat to apply became the focus of the applications testing at the center.

In partnership with the customer's engineering staff, a simulated production lay up line was constructed. This mini production line allowed the team to see first hand how different heat sources affected the curing rate of the fiberglass. From hot air to radiant heat, each was evaluated as to determine the benefits of each method. In the end, the long wave infrared emitting panels proved to be the best solution to give just enough boost to start the exothermic process.



### **Benefits:**

- Oven fit into existing process line without any modification.
- No additional floor space used
- Electric IR is efficient, easily controlled, and turned off when not needed

**About the TAC:** Southern Company operates two Technology Applications Centers, one located in Atlanta, GA, operated by Georgia Power. And, the other located south of Birmingham, AL operated by Alabama Power. Both facilities are designed to assist Sothern Company industrial customers with solutions related to heating processes.

*Call the TAC for more information*  
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