

Highlighting innovative design features  
and useful application information for  
**Thermo Scientific Temperature Control**

# smart notes

**operation/installation tips** ▶ Bath Circulators

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# Q A

**What steps can I take to ensure that my heated bath circulator can actually bring my application to setpoint temperature?**

**Optimize the installation:** If you have already purchased a bath that is not able to reach set point temperature, there may be more performance already available to you. Taking steps to achieve the best thermal performance by minimizing mass, maximizing heat transfer to your application, and minimizing heat loss to the room will decrease the time it takes to achieve set point. If you still cannot attain set point, adding a Boost Heater accessory will provide the extra wattage needed to overcome the heat losses. A Boost Heater accessory works by safely and conveniently adding 40% to 100% more wattage to what your heated bath circulator already has.

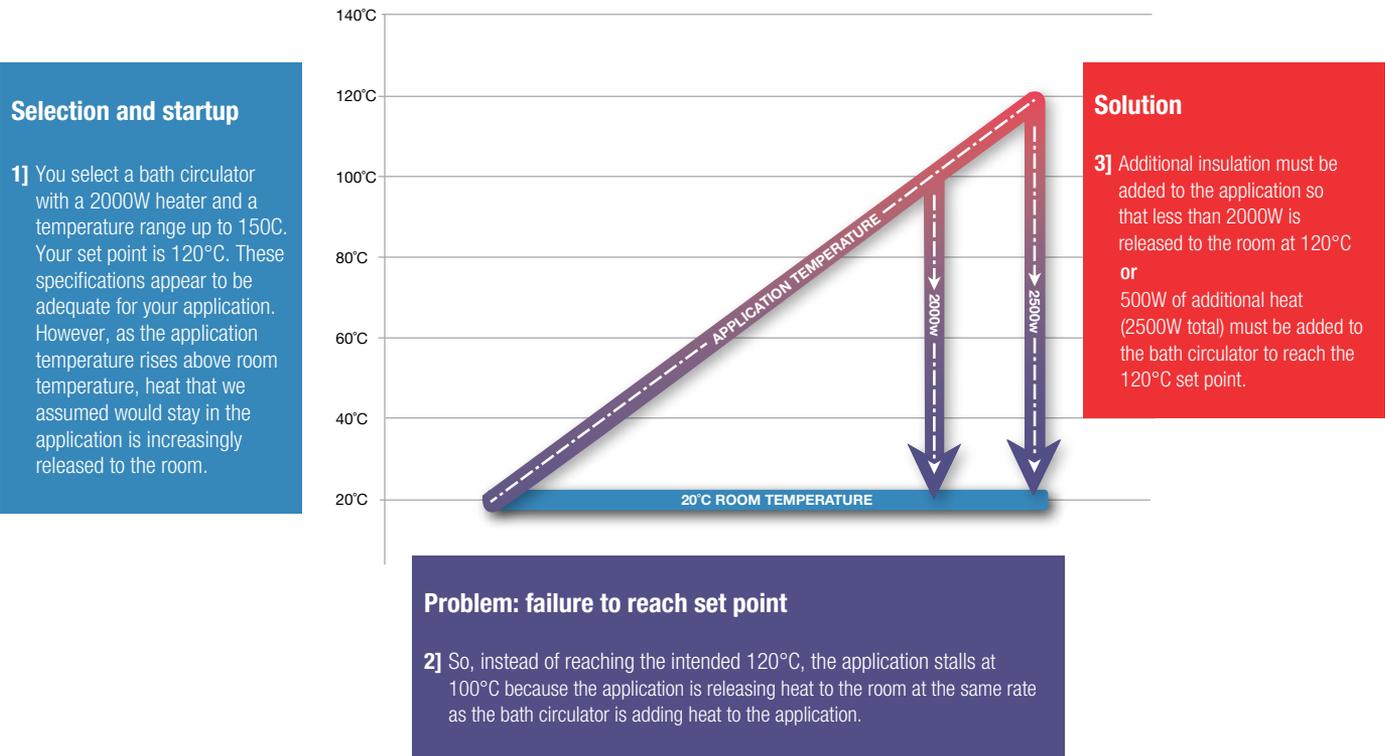
**Optimize selection:** Before selecting a bath circulator talk with one of our application specialists. They can help you determine if your application requires more heat than a heated bath circulator alone can provide. This is achieved by combining the Boost Heater accessory with the heated bath circulator for a perfect fit.



# what can I do?

## Optimize the selection, operation and installation

Follow the steps below to understand WHY an application cannot reach the desired temperature even though the bath specifications are within or exceed the temperature range needed for your application.



**Note:** If you have a very large application that includes extra surface area that will shed heat to ambient, it will take more time to achieve set point. To learn more about this, refer to our smart note “How do I get the best (fastest) time-to-temperature from a heated bath circulator?”

## Boost Heater

Depending on what is needed, this is available with 1200W or 1600W of additional heat. This accessory is available with the Thermo Scientific™ ADVANCED and PREMIUM heated immersion circulators that can be matched with the Thermo Scientific™ S7, S13 and S30 heated baths as well as the Thermo Scientific™ A28 and G50 refrigerated/heated baths.

## Summary

When you need to control the temperature ramping of your application, be sure you have accounted for heat loss, mass, and poor heat transfer. Adding a Boost Heater accessory will give the control you need if your bath circulator cannot maintain the required temperature ramp.

Visit [www.thermoscientific.com/tctechlibrary](http://www.thermoscientific.com/tctechlibrary) for product brochures and detailed application notes.

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