

WET LABORATORY HEATING

BriskHeat flexible heating tapes, heating mantles, beaker heaters, cloth heating jackets, and temperature controls

Application

Wet laboratories are laboratories where chemicals, drugs, and other material or biological matter are handled in liquid or volatile phases. Examples include chemistry, biology, and research labs. There are several applications in this environment where it is necessary that the experimental conditions have elevated temperatures. Temperatures range from just over ambient to above 750°F (400°C) for the purposes of synthetic reactions, removal of moisture to eliminate it as a variable, sampling, preparation, detection, monitoring of liquids/solids/gases, and sterilization of laboratory equipment.



Solutions

XtremeFLEX[®] Flexible Heating Tapes and Cords are versatile, easy-to-use, and an economical choice for wet laboratories. The durability and flexibility of XtremeFLEX heating tapes and cords allows them to twist, turn, bend, and wrap around many objects; even those with diameters as small as a pencil. In addition, they have high-temperature capabilities up to 1,400°F (760°C) and watt densities up to 13.1 W/in² (2.0 W/cm²). These features allow them to heat up very quickly and maintain high operating temperatures. A wide range of standard sizes are available to fit most application needs, with custom sizes available upon request. For heating applications under 392°F (200°C), silicone rubber heating tapes are often selected due to their resistance to moisture and chemicals. To improve energy efficiency, it is recommended that heating tapes are used in conjunction with insulation.



Custom Cloth Heating Jackets are a preferred option for applications that require exceptional accuracy and heightened functionality. These "all-inclusive" heaters are easy-to-install and remove and have tight temperature tolerances, built-in temperature sensors, and insulation. Each heater is custom made to fit perfectly around the object being heated and meet the exact requirements of the application.



Heating Mantles (HM) offer uniform heat distribution for round-bottom flasks. These soft-sided heaters are a safe alternative to Bunsen burners. They are made to fit precisely around the flask and provide high-temperature capabilities up to 900°F (482°C). Standard sizes of heating mantles range from 50 ml to 12,000 ml. There are self-standing models and models designed for use with a basket ring stand. Heating mantles can also be custom designed to fit any shape and size.

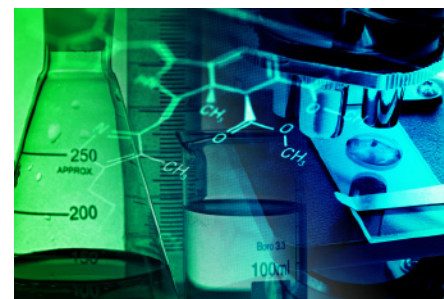
Silicone Rubber Beaker Heaters (GBH) are moisture and chemical-resistant heaters that fit precisely around Griffin and standard beakers. They are capable of providing an even distribution of heat around the surface of the beaker. Silicone beaker heaters can safely reach temperatures up to 450°F (232°C). Standard sizes range from 250 ml to 1,000 ml. Custom sizes are available upon request.



WET LABORATORY HEATING (Continued)

Solutions

Temperature controllers are necessary to regulate any heater's performance. Pair any of these heaters with one of the many BriskHeat benchtop temperature controllers for a complete system. An economical and popular choice for wet lab applications is the SDC digital on/off temperature controller. This temperature controller features simple on/off temperature control, digital display, and factory-installed Type-K or Type-J thermocouple sensor. It has a range up to 900°F (482°C) Type-K and 700°F (370°C) Type-J with accuracy of +/- 1%. When more precise temperature control is needed, we recommend our SDX digital PID benchtop controller. It has an operating range up to 999°F (999°C) with accuracy of +/- 0.5%. The TC4X digital controller can be used if the controller will be in an area where it may get wet. Another option, LYNX®, BriskHeat's newest PID temperature controller, is often the preferred choice. It is a fully functional PID system in a small compact design, features easy-to-program and view 3-button/3-digit display, plug-and-play operation, and excellent accuracy of +/- 0.25°C (0.45°F) plus 0.125% of measured temperature. LYNX® also has a temperature range up to 1,112°F (600°C), features a highly visible alarm, degrees "C" or "F" programming, choice or thermocouple or RTD sensors, and a tabletop design option. Pair an HL101 High Temperature Limit Controller with our plug-and-play controllers for added safety. BriskHeat also offers custom-designed temperature controllers to fit unique application requirements.



Examples of Laboratory Apparatus

Glassware Flasks	Tubing	Tanks
Beakers	Columns	And More
Graduated Cylinders	Condensers	
Piping	Chambers	

Additional Uses

Silicone rubber heating tapes can be used in almost any hose or delivery system where viscosity issues are a concern.

Products

XtremeFLEX Heating Tapes & Cords	SDC and SDX Temperature Controllers
Heating Mantles	LYNX® Temperature Controller
Beaker Heaters	TC4X Digital Controller
Cloth Heating Jackets	HL101 High Limit

Industries

Analytical Instrumentation/Laboratory	Manufacturing
Chemical Processing/Extractions	Pulp & Paper
Food & Beverage Processing	

Types of Users

Scientist/Researchers	Laboratory Professionals
Chemists	Students
Biologists	



HL101



SDX



LYNX®