



Product Note – Grafheat Base Heaters

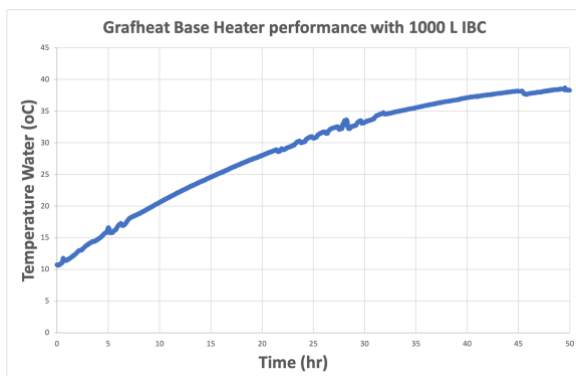
LMK Thermosafe are pleased to present the latest “GrafHeat Base Heater” range of products using our advanced, patented and national award-winning heating technology.

This unique product has been developed using carefully tuned and optimised Graphene within polymer composites. Our heating technology uses positive temperature coefficient (PTC) effects to control both the power and temperature of the heating devices. The outcomes are extremely safe and economical to use for large and small industrial applications, with or without our traditional flexible heating jackets or Induction Drum heaters.



1. Designed for practicality

“GrafHeat Base Heaters” have been developed especially for industrial scale applications requiring heating from below. These easy to install products can be used with various sized drums and IBCs. The base heaters are very safe to use and do not require temperature controller for core safety. They are highly energy efficient, automatically regulating power dependent on the load, thus providing substantial cost and energy savings compared to large ovens or other forms of radiant heat. The range is very versatile, can be used with both 110 and 240 V power supplies and can be made to many different sizes, shapes and styles.



2. Safety First

Grafheat base heaters are self-regulating and do not require temperature controllers for safety. These can be added if sensitive products need heating to various temperatures. The heating devices have a self-limiting point of 110°C whilst the plate surface temperature regulates at typically 60-70°C. This is safe to use with plastic IBCs and totes of standard construction, with or without a metal cage outer.



3. Design to fit

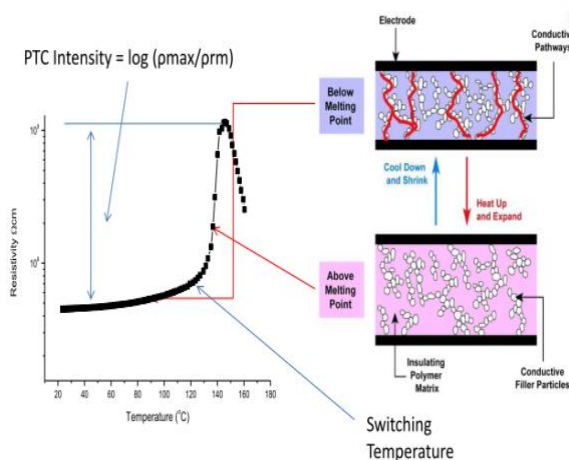
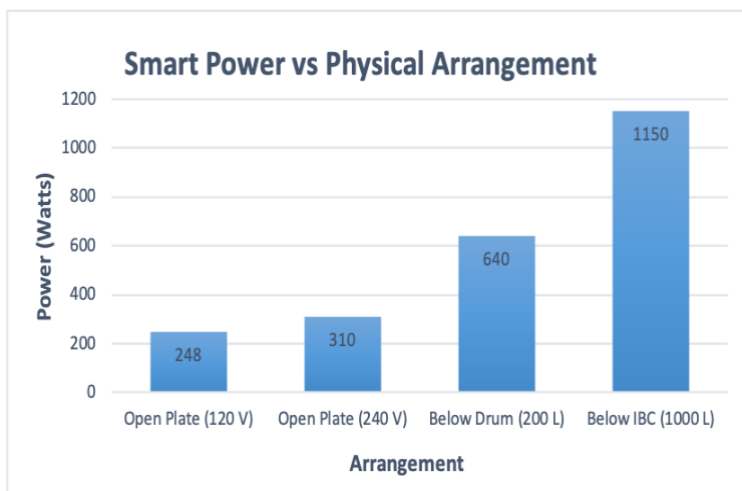
Grafheat base heaters are manufactured in standard designs to suit various sizes of IBCs and drums from 10 litres upwards. Where required for valve outlets, slots or cut-aways are incorporated.

If we don't have a standard size, we can uniquely design element positions to suit. Simply send us drawings and photographs of your container. The same base heater size can deliver a power ranging from 250 to 2000 watts depending on the specific requirement for your material.



4. Advanced Technology

Grafheat base heaters automatically regulate power, proportional to the load required and ambient temperature, reducing carbon emissions compared to older technologies. Without failure sensitive moving parts or electronics this provides the most efficient and reliable way of heating a container from the bottom. Guaranteed long term durability for thousands of operations saves emissions and minimises both operational and lifetime costs.



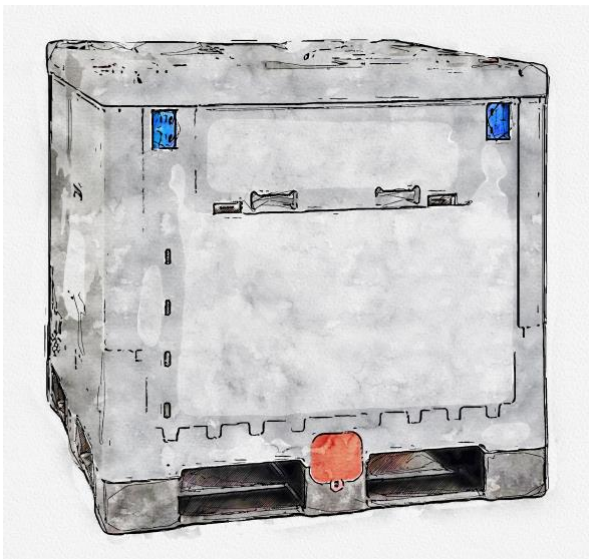


5. Use with various totes and containers



GrafHeat has been tested with many styles of container, including heavily insulated “bag-in-box” formats used for the transportation of sensitive liquids.

The unique ability to limit output automatically and configure power output to match the properties of the material help deliver very safe and even heat distribution.



6. Use with flexible heating jackets

GrafHeat has been specifically designed to operate in conjunction with our range of flexible heating jackets for all sizes and configurations.

Where “fold-flat” closed loop container supply arrangements are in place it is easy to mix and match the flexible jackets and the base heaters to suit.

Where drums require longer term storage at temperature, the base heater can be combined with insulation only or heated jackets.