



SmithHeat™

Ceramic Band Heaters

COMPOSITION

SmitHeat® Ceramic band heaters are medium-to-high temperature heaters that can deliver up to 1200°F. The nickel-chrome heating cores of these durable heaters are placed inside interlocking ceramic tiles that are assembled like a brick wall. A ceramic fiber insulating mat and a stainless steel jacket cover this assembly. This construction makes ceramic heaters flexible and highly energy efficient. An energized ceramic heater that operates at 1200°F internally will have around 400°F on its outside shell.

Theoretically, there are no restrictions on the diameter that ceramic heaters can attain; however, because these heaters utilize ceramic tiles that are available only in specific lengths, the width of these heaters falls within a certain incremental range of sizes.

The Ceramic heating band is suitable especially for applications with high watt density and therefore for higher temperatures. Ceramic heaters are the potential energy savings and the fact that less heat is released to the atmosphere than with mica heaters.

An additional advantage of Ceramic heaters is that they transfer heat through conduction and radiation. This makes their tightness on barrels less critical; thus they are less prone to thermal expansion problems.

Our ceramic band heaters typically use 10% less energy than a mica band heater when manufactured with extra heat saver insulation.

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on these tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping.