

COIL & CABLE HIGH PERFORMANCE HEATERS

Highwat coil and cable heaters are reliable, high performance small diameter heaters used whenever a large amount of heat is required in a confined space. These heaters are fully annealed and can be formed into various shapes and forms. Coil and cable heaters can accommodate thermocouple sensors, and their cross-section could be made square or rectangular to improve heat transfer. Highwat coil heaters are successfully used as powerful heating cells in plastic injection molding hot-runner nozzles.

Coil and cable heaters are made by placing a pair of tiny coils or two lines of straight resistance wire inside a very dense MgO medium. This core is then inserted into a stainless steel shell. These high-performance heating cells can acquire temperatures of up to 1500 ° F. A coil heater in its unformed straight stage can have a maximum length of 6ft and its cross-section can be square or rectangular, while a cable heater can be 300ft long and is available in round cross sections. Thermocouple sensors could be installed internally at the tip or the middle of a heater. Power terminals, as well as ground and thermocouple wires are attached to the internal wires inside a transition adapter, which has a larger diameter than the actual heater's cross-sectional diameter. Although Highwat coil and cable heaters are fully annealed and can acquire any shape, they should be formed to a final shape in a single attempt. Forming and bending operations harden the outside stainless shell of a heater, and re-annealing might become necessary if changing the form is required. The wattage in a coiled heater could be distributed, with higher wattage at the two ends, simply by stretching and distancing apart the middle loops.