

Curing PVC Sealant with a Model 5194 Infrared Line Heater

Application

A manufacturer of specialized batteries curing a PVC sealant on battery covers and cases.

Problem

Precise Heating Area - To avoid damage to the battery, heat to cure the PVC sealant had to be applied precisely to the area where the 1.5 inch (38 mm) deep cover snapped onto the case.

Workstation Cost - To satisfy production rates, an operator had to manually load and unload several workstations simultaneously. Because multiple workstations had to be supplied with a heat source, it was important that the heat source be inexpensive.

Solution

Heat - On a rotating turntable at each workstation, a Model 5194-02 Infrared Line Heater was mounted vertically adjacent to the area to be heated.

Heat Shield - The area below the PVC sealant was masked from the heat by a water-cooled shield.

Benefits

Precise Heating Area - The Model 5194 Infrared Line Heater, combined with the water-cooled shield, provided the precise application of heat required to cure the PVC sealant without damaging the battery.

Low Cost - The Infrared Line Heater equipped each workstation with a heat source for under \$1000.

Curing Time - Using the Infrared Line Heater at each workstation, the manufacturer was able to cure the PVC sealant within the 260-300 seconds it took for the turntable to complete one rotation.