

Custom Curing Batch Oven

Manufacturer Job Profile



Requirements

A manufacturer of carbon fiber car body parts contacted ITS to manufacture a new carbon fiber cure flow through batch oven to help expand their current capacity. The customer's application was an out of autoclave process that required uniform airflow and temperature throughout the work chamber.

Solution - A Custom Curing Batch Oven

ITS manufactured and delivered a large custom flow through composite curing oven. The flow through design had high temperature roll up doors at the front and the back of the oven. The flow through design provided a better workflow through the manufacturing facility. The oven was designed with our 3/5 air flow technology supply/return ducts to give uniform air flow across the wide work chamber.

With space limitations at the front of the oven, our high temperature roll up doors were installed which offered considerable plant floor space savings compared to traditional bi-parting doors. The roll-up doors offer a convenient push button up/down operation and are rated to 500°F. The doors also offer a valuable safety feature as well. If needed, the operator can push through the door allowing exit from the oven in power failure or emergency situations.

The new oven will give the customer additional capacity and better and more uniform heating capability over their existing ovens. Because of the ovens size it was shipped disassembled and was installed on the customer's plant floor in 8 days.

Chamber Size: 36'-0" wide x 36'-0" long x 8'-0" high (clear dimensions)

Maximum Operating Temp: 220° F

Air Temperature Uniformity: +/- 10° F

Heat Source: Natural Gas

Product Opening: 10'-0" W x 8'-0" H (qty 2)

Curing Batch Oven unique features:

- Nine (9) interior roof mounted heat rated lights connected to a switch located at each door
- Roll up doors
- Allen-Bradley MicroLogix programmable logic controller
- Allen-Bradley 10 inch color touch screen operator interface panel

