

# Heating Plexiglas with a Model 4185 Infrared Strip Heater

## Application

An office products manufacturer heating Plexiglas (Luxan) prior to bending it into shape.

## Problem

**Poor Quality** - The existing forced air convection heat source resulted in stress marks in the bent Plexiglas.

**Excessive Scrap** - The manufacturer had to scrap eight percent of all parts due to excessive stress marks in the bends.

**Employee Discomfort** - The forced air convection heat source had to be left on continuously, making employees uncomfortable.

## Solution

**Heat** - A Model 4185-38 Infrared Strip Heater was used to apply heat to the Plexiglas prior to bending.

**System Configuration** - The Infrared Strip Heater was installed over a table that contained a bending form. After one bend area was heated and the bend made, the table was turned to repeat the process on a second bend.

**Instant On/Off** - The Infrared Strip Heater heated up and cooled down instantly.

## Benefits

**Improved Quality** - The Infrared Strip Heater eliminated the stress marks at the bend in the Plexiglas.

**Reduced Scrap** - With the Infrared Strip Heater, the manufacturer was able to reduce the scrap rate by 94 percent to less than .5 percent.

**Improved Employee Comfort** - The instant on/off capability of the Infrared Strip Heater made it possible to operate the heater only when heat was required prior to bending the Plexiglas, significantly improving employee comfort.

### **Reduced Energy**

**Consumption** - The manufacturer realized a 32 percent savings in energy consumption over a 16 hour shift by using the Infrared Strip Heaters as the heat source.

**Space Savings** - The Infrared Strip Heater took up less work space than the heat source it replaced.