

# Curing Resin- Impregnated Paper with Model 4554 Pyropanels

## Application

A manufacturer of oil filters curing resin-impregnated pleated oil filter paper to thermally set the pleats.

## Problem/ Requirement

**Line Speeds** - Existing gas oven accommodated line speeds of 10 feet (3 meters) per minute. The manufacturer needed to increase line speeds to expand production output.

**Uneven Cure** - Increasing the line speeds above 10 feet (3 meters) per minute with the existing gas oven caused the resin to cure unevenly and the paper pleats to set improperly.

## Solution

**Heat** - Model 4554-25-06 Pyropanels were installed to preheat the bottom of each of six lanes of pleated paper prior to introduction into the gas oven.

**Heat Zones** - Each Pyropanel functioned as a heat zone that could be turned on or off depending upon the number of lanes of pleated paper being processed.

## Benefits

**Increased Line Speeds** - The manufacturer was able to increase line speeds from 10 feet (3 meters) to 17 feet (5 meters) per minute using the Model 4554 Pyropanels to preheat the resin.

**Even Cure** - The preheat provided by the Pyropanels consistently produced an even cure of the resin.

**Decreased Energy Costs** - By turning off some Pyropanels when all six lanes of pleated paper were not running, the manufacturer did not consume energy unnecessarily.

**Utilized Existing Resources** - By adding a preheat with the Pyropanels, the manufacturer was able to preserve the investment in the existing gas ovens.