

# Heating Aluminum with a Model 4554 High Density Pyropanel

## Application

A manufacturer heating aluminum prior to bending it to create custom parts.

## Problem

**Slow Line Speed** - The existing method of heating the aluminum in a gas-fired convection tunnel limited the line speed to 50 feet (15.2 meters) per minute.

**Poor Quality** - The existing heating method resulted in stress marks and other imperfections in the bent aluminum parts.

**Excessive Scrap** - An excessive number of parts (five percent) had to be scrapped due to the poor bend quality achieved with the existing heating method.

## Solution

**Heat** - A Model 4554-A-10-06 High Density Pyropanel was used to heat the aluminum to the proper temperature (above 235°F [113°C]).

**Power Control** - A Model 664F Phase Angle SCR Power Controller controlled the power to the heater.

## Benefits

**Increased Line Speed** - Line speed increased to 95 feet (29 meters) per minute using the High Density Pyropanel.

**Improved Quality** -

Heating the aluminum with the High Density Pyropanel eliminated the stress marks and other imperfections in the bent aluminum parts.

**Reduced Scrap** - The scrap rate was reduced to less than one percent with the new heating system.