

Drying Ink on Enamel-Finished Metal with Model 4554 High Density Pyropanels

Application

An appliance manufacturer drying silk screened ink on enamel-finished metal washing machine lids.

Problem

Space Restrictions - The manufacturer had very little space available for a drying system.

Part Discoloration - The enamel on the washing machine lids discolored if it was heated for too long a period.

Solution

Heat - Two Model 4554-A-38-12 High Density Pyropanels were mounted parallel to product flow on one side of the existing product conveyor to heat the washing machine lids after they were printed.

Back-up Reflectors - Self-cleaning ceramic reflectors were mounted opposite the High Density Pyropanels to maximize the energy from the Pyropanels.

Vertical Installation - The High Density Pyropanels and opposing reflectors were encased in an oven and installed vertically on the conveyor.

Benefits

Well-Utilized Space - By installing the encased Model 4554 High Density Pyropanels and back-up ceramic reflectors vertically on the conveyor, very little valuable floor space was required to dry the ink.

Short Drying Time - The heat applied by the High Density Pyropanels dried the ink in 15 seconds.

Consistent Quality - The short drying time did not cause the enamel to discolor and consistently produced quality washing machine lids.

Maintenance Free System - The self-cleaning back-up reflectors eliminated the need for continual maintenance of the oven walls.

Low Energy Consumption - By heating the washing machine lids from one side only, the manufacturer did not consume excessive energy.