



**THE POWER BEHIND THE PACKAGE**

## **PDC Steam Shrink Tunnels Features and Attributes**

PDC has manufactured steam tunnels for over twenty years at its facility in Connecticut. All aspects of fabrication are done in house, including sheet metal work, welding, assembly, wiring and testing. PDC tightly controls all aspects of product quality.

PDC steam tunnels are designed to use only as much steam as is necessary to shrink the label, unlike competitive steam tunnels which flood the chamber with excess steam, drawing out most of it as exhaust, which is wasted energy.

PDC has developed proprietary technology that controls and processes the steam in a way that optimizes the shrink process and results in highly accurate temperature control.

PDC more precisely regulates steam in its tunnels using a unique combination of:

- step down regulators
- condensate traps
- special steam filtering (to remove particulates and additional moisture)
- electronic regulation, controlled by a digital readout controller
- a special linear steam valve

The controller readout shows:

- target temperature
- actual temperature
- percentage open of main steam valve
- controls chamber temperature to within +/- 2 degrees F

These controller parameters provide users with critical monitoring information on:

- conditions inside the tunnel
- the control system's function

PDC Steam Tunnel options include:

- Complete stainless steel construction, eliminating copper piping
- Heated Shroud, which covers the top of the container while in the tunnel with an inverted, heated stainless steel channel which prevents condensate drip and minimizes moisture around the cap or inside bottles being labeled empty
- Culinary Grade Steam Filter – purifies the steam supply to a culinary level and removes excess moisture

PDC Steam tunnels are used in the R&D labs of customers such as Nestle, and in raw shrink film stock providers such as Bonset. PDC facilities and steam tunnels are often used for R&D by resin suppliers, such as Eastman's **PETG-LV** and Plastic Suppliers' **PLA**, corn-based shrink films.