



IMPERIAL DESIGN®  
TECHNOLOGIES, L.L.C.

## CROWN SERIES COOLING TUNNELS



### Design Features

- Hygienic, easy-to-clean, round stainless steel frame
- Stainless steel tunnel covers and interior panels
- Unique lift cover panels on each side provide open access to tunnel interior
- Convection and/or radiation cooling modes
- Available in 34", 42" & 48" conveyor belt widths
- Water or air conduction cooling below conveyor belt
- Wash down rated variable speed conveyor drive
- Advanced, user-friendly controls with Allen-Bradley components
- NEMA 4 control panel



Imperial Design Technologies is a United States based designer & manufacturer of a wide variety of extrusion machines, independent chocolate depositors, chocolate (chain) molding plants, and chocolate enrobing and cooling equipment. The machines are used for the production of individual extruded items, molded chocolate items, and bar items for the confectionary, bakery, health food, and snack industries.

*Proudly Designed & Built in the USA*



# CROWN SERIES COOLING TUNNELS

## Standard Design Features

- Adjustable louvers above the product belt conveyor allow the operator to select between radiation and/or convection cooling modes.
- Chilled water or cooling air options available for conduction cooling below the product belt conveyor.
- Stainless steel infeed bed provides space for decorating of product prior to entering the tunnel.
- Standard automatic conveyor belt tracking and manually adjustable nose bar allow flexibility for incorporating into existing production lines.
- Powder-coated, high-strength, tubular steel main frame. Stainless steel upgrades also available.
- Modular design provides flexibility for accommodating most any product or line speed.
- Tunnel covers are insulated stainless steel construction and open from each side for complete access to the tunnel interior.
- Stainless steel conveyor belt bed and tunnel bottom bed.
- Chilled water heat exchanger or R-404a refrigerant cooling module options available.
- Multiple cooling module arrangements are available to handle a wide variety of cooling requirements. Standard modules provide up to 6 tons (18,000 Kcal/hr) of cooling, while free-standing condensers provide the capacity needed for larger cooling loads.
- PLC and precision sensors regulate the air temperature within the tunnel. Electric re-heat coils are standard for humidity control.

## Technical Specifications

- Conveyor belt speed: 2 ft/min to 24 ft/min  
(0.6m/min to 7.5m/min)
- Conveyor belt widths: 34.0" (864 mm), 42.0" (1067 mm), 48.0" (1220 mm)
- Conveyor belt: single ply, FDA approved, based on product or optional customer specified
- Control side: left or right hand
- Standard power supply: 208v/240v/480v, 3-Phase, 60 Hz
- Conveyor belt height: 39.38" (1.00 m), +/- 1.00" (25 mm)
- Control components: Allen-Bradley
- Instruction manual: one (1) DVD in English
- Options: number of cooling zones, condensing unit size/condensing unit type, complete stainless steel construction

Crown Series Cooling  
Tunnel Dimensions

Conveyor Width	Width	Height
34.0" (864mm)	54"	55"
42.0" (1067mm)	62"	55"
48.0" (1220mm)	68"	55"

Standard Cooling Module Length: 6.5 ft  
Optional Cooling Module Length: 4.0 ft  
Standard Refrigeration Module Length: 6.5 ft



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Your North American Source for Custom Food Processing Equipment

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