

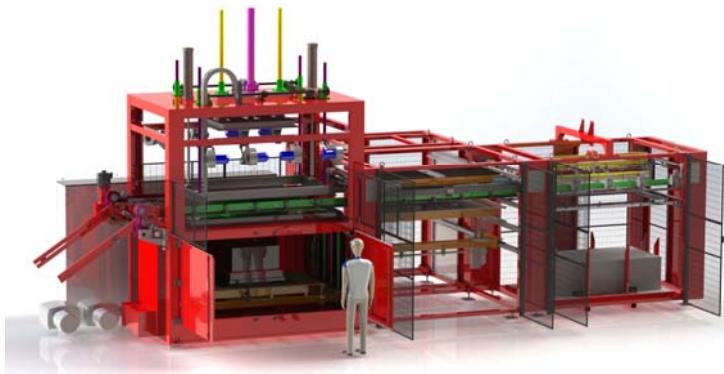
Thermoforming machine for refrigerator industry

CREA SL 2010

Crea SL 2010 is one of the Cannon solution for thermoforming to refrigerator industry: a simple but **fully automatic machine** for cabinet and door liners production.

This in-line vacuum forming machine can support high production rate with a relatively simple mechanical structure and concept. **High production/investment rate** ranks it among one of the best cost-saving option for refrigerator customers.

Mold change time is minimized by **fast mold change solutions** making the thermoformer suitable for both small batch production and high production per mold.



The machine has a **three-stations configuration**: loading, heating and forming. An electrically-driven linear conveyor with spiked chains operates material transfer through the machine.

The distance between the transfer chains is adjustable to **fit with different material widths**. Adjustment is done automatically with an electrical motor. Similarly, **automatic adjustment** is possible for **sheet thickness variation**.

Main Technical Data

Max forming aperture	2000 x 1000 mm ¹
Min forming aperture	700 x 500 mm
Heating elements	Ceramic ²
Installed heating power	156 kW ³

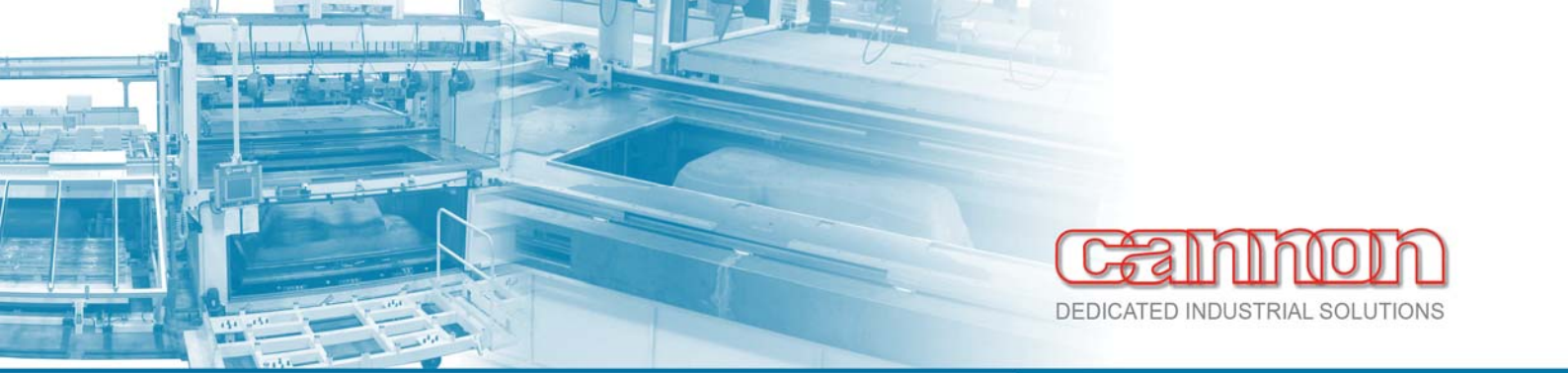
¹ available from 1500 x 800 up to 2200 x 1000

² available also quartz

³ only for 2000 x 1000 mm

Main Performance Data

Cabinet liners productivity (positive mold, HIPS, 4.5 mm)	65 pieces/hour
Door liners productivity (positive mold, HIPS, 1.2 mm)	100 pieces/hour
Max product height	600 mm
Max negative product height	50 mm



EACH STATION MAIN FEATURES

LOADING AND CENTERING

- Fix adjustable loading position thanks to a holding table with reference pins
- Sheet presence detector and multiple sheet detector to ensure that one sheet only is picked up
- Automatic loading thanks to a Pick & Place with a system of vacuum caps to move the sheets between loading position, centering and the chain conveyor
- Automatic 2D centering thanks to bars with reference pins pneumatically actuated

HEATING

- Two heating banks of ceramic IR lamps, several half-sized, individually controlled
- PLC and operative panel including a close-loop temperature control to optimize heating control
- Sheet supported by the transfer chains and by two chill-bars in order to cool the unsupported edges and keep them stiff
- During the cycle, upper heating bank in heating position while lower vertically movable to avoid any possible contact between the sheet and the lamps
- Automatic retraction of lower heater in case of emergency

FORMING

- Aperture plate and clamp frame completely dedicated.
- Aperture plate vertically movable to prevent any contact between the plate and the sheet sag due to heating
- Mold table and plug assist electrically driven
- Fast mold change solutions with universal mold mounting plate, pneumatic clamping system and easy-slide devices to reduce mold change time up to 15 min.
- Bubble blowing with sealed mold box
- Servo plug assist
- Pre-cutting unit for door separation



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