



# GN

Thermoforming Equipment



# GN DM Series

## ■ At the cutting edge

GN Thermoforming Equipment has set the world standard for the plastics industry by developing a complete line of robust and dependable thermoforming machines. All GN technology incorporates an in-mould cutting system for consistent and accurate trim. These machines are easy to use and ideally suited to produce high quality thermoformed plastic products from a variety of roll-fed thermoformable materials.

Continuous research and development are the cornerstones of GN's advanced technology. Our team of experienced engineers focuses on equipment design and continuous improvement based on customer feedback and industry trends.

GN ensures the productivity of its thermoforming machines with one of the industry's most comprehensive customer service programs. Our worldwide network of agents and qualified GN technicians are available to offer a reliable after sales service.

Leading plastic package manufacturers around the world have come to rely on GN Thermoformers to make their businesses more productive and profitable.

## ■ GN DM Series Thermoformers

The GN1914DM with patented technology is a plug-assisted, Dual Mould Thermoforming Machine equipped with multi-zone upper and lower ovens. It will thermoform parts to a depth of 152mm (6") in two negative moulds each having a maximum forming area of 482mm x 355mm (19" x 14"). The GN1914DM utilizes an in-mould trim that guarantees the production of 100% identical parts while keeping tooling costs at a fraction of other in-mould cutting systems. Parts are handled by a robotic part handling system ensuring the steady, dependable delivery of stacked product. This extremely smooth operating machine truly is a high-output, high-volume Thermoformer.

### Features and benefits:

- Robotic product handling system
- Built-in diagnostic system
- Multi-zone upper and lower ovens incorporating an infrared heating system
- Positive and negative forming
- Quick tool changes
- Internet Connectivity

### Optional equipment:

- Material preheating station
- Servo plug
- Magnetic quick tool change system
- Scrap handling system
- Additional zoning of upper and lower ovens

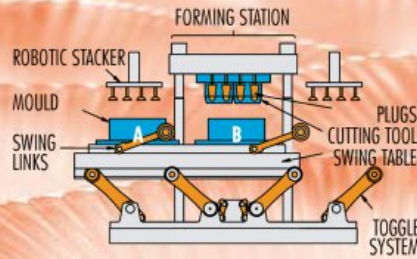




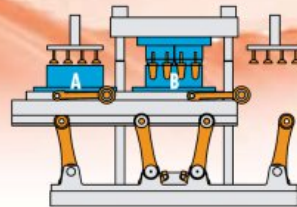
# FORMING THE W

## Technology

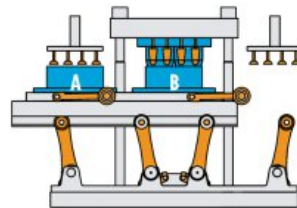
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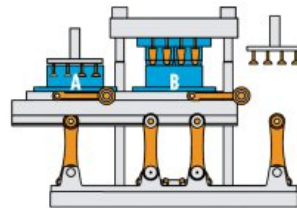
Material transport  
Cooling of parts in mould "A"



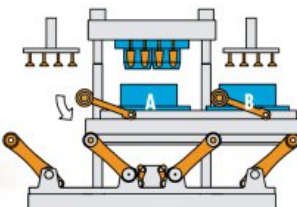
Clamping and plugging of material in mould "B"  
Cooling continues in mould "A"



Forming pressure and vacuum applied to mould "B"  
Cooling continues in mould "A"



Cutting of parts in mould "B"  
Stacker removes parts from mould "A"



Mould platform swing  
Stacker takes parts from mould "A" to conveyor

Process repeats with mould "A" entering forming station



O R L D

# GN

## Thermoforming Equipment

### ■ GN Accessories

#### GNPH25 Pre-Heater

The GNPH25 Pre-Heater is specifically designed for heat conditioning of thermoformable grade materials before being fed into thermoforming machines.

It ensures optimum cycle speed when processing polypropylene and other heavy gauge sheet.

This insulated stand-alone unit may be used in conjunction with any thermoforming machine. This unit is placed directly in front of the thermoformer, thus avoiding unnecessary heat loss.

To ensure even heat distribution, the sheet passes through a series of guiding rolls while being subjected to an ambient convection heat.

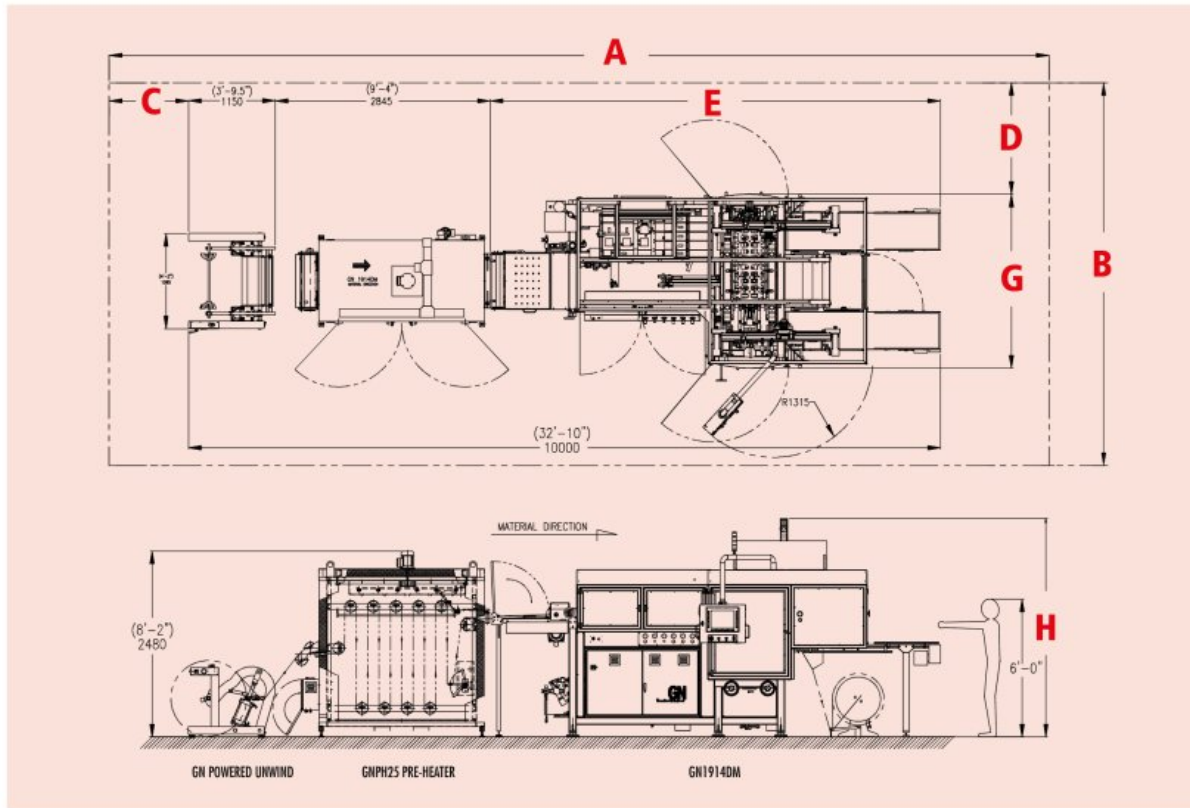
As the material is never in contact with direct heat, it can expand uniformly during this heating process.

#### Pre-Heater benefits:

- Optimum thermoforming process
- Low power consumption
- Even heat distribution of sheet
- No overheating during machine stoppage







## Machine specifications

	GN1914DM
Forming Area	482mm x 355mm (19" x 14") maximum 241mm x 190mm (9.5" x 7.5") minimum
Depth of Draw	152mm (6") below sheet line (maximum) 15mm (.59") above sheet line (average)
Knife Length	3330mm (131") for APET 5000mm (197") for other thermoform. materials
Sheet Width	533mm (21") maximum 292mm (11.5") minimum
Material Thickness Range	0.25mm - 1.50mm (0.010" - 0.060")
Material Roll Diameter	1000mm (39") maximum
Dry Cycles per Minute	50 maximum
Main Supply Voltage	380V to 480V 24 Volt DC Control Voltage
Power Consumption	18 Kva approximate
Air Pressure	6.8 bar (100 PSI) minimum
Air Consumption (Average)	4500 Litres/min (159 CFM)
Cooling Water Consumption	30 Litres/min @ 15 °C - 20 °C (6.6 gal/min @ 58 °F - 68 °F)
Machine Dimensions (l x w x h)	5946mm x 2300mm x 2832mm (234" x 91" x 112")
Machine Weight	7,260 kg (16,000 lbs)

### GN1914DM MACHINE - PREHEATER AND ROLL LIFT

DIM "A"	48'-7"	14800mm
DIM "B"	17'-8"	5385mm
DIM "C"	6'-0"	1830mm
DIM "D"	6'-0"	1830mm
DIM "E"	19'-7"	5960mm
DIM "G"	7'-7"	2300mm
DIM "H"	9'-7"	2920mm

All dimensions are approximate

### PH900 PRE-HEATER SPECIFICATIONS

Material thickness	0.35 - 2.00 mm
Temperature	100 °C - 150 °C inside oven
Heating power	30 KW
Maximum sheet width	800 - 900 mm approximate
Dimensions (l x w x h)	2240mm x 2440mm x 2180mm 88" x 96" x 86" + removable feet

All dimensions are approximate

SPECIFICATIONS SUBJECT TO CHANGE



**GN**  
Thermoforming Equipment

**GN's Vision: Build Success With Our Customers!**



**Cost effective tooling is designed, manufactured and production tested at our facility.**

**GN Thermoforming Equipment**

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**A world wide network of GN representatives  
is available to assist you.**

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