

MODEL 44

Thermoformer and Trim Press

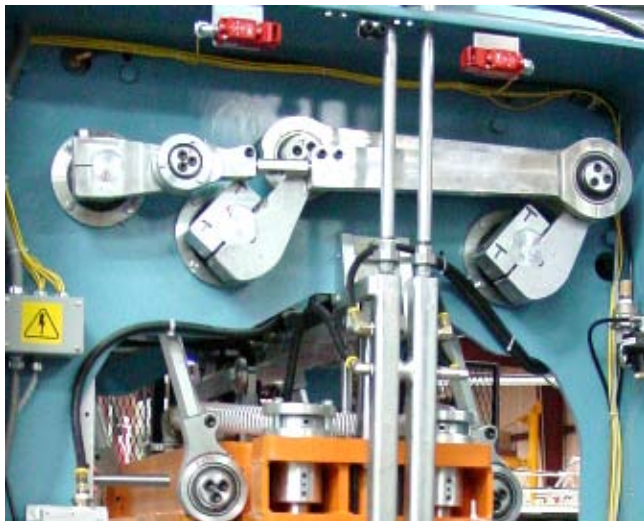


 **IRWIN**
Research & Development, Inc
THE ORIGINAL TECHNOLOGY

MODEL 44

Thermoformer and Trim Press

When you are looking for process flexibility, the Irwin Research and Development Model 44 Former and Trim Press are the choice for "46 web-width processors.



The Model 44 Thermoformer's key to success is its flexibility and adaptability. It provides exceptional performance throughout a range of sheet types, including TFPP, PP, PET, CPET, HIPS, and polystyrene foam. The optional Mini-Magnum configuration allows a 6" product depth making it an excellent candidate for cup production. Independent platen motion is on the Model 44 providing the timing necessary for processing shallow and deep products with the optimum of control.

The Model 44 heat tunnel is available in lengths ranging from 120" to 200" with standard tubular heaters as well as the optional combinations of tubular and quartz, or

The Model 44 is available in a variety of configurations suitable for numerous applications. Throughout the world the Model 44 is providing low cost, reliable, and high volume production around the clock yielding the advantage needed in the competitive plastics industry.

all quartz heating elements. The heat tunnel control is via Ballerina through an Opto 22 Mystic system that provides precise PID control of up to 56 thermo couple zones and total of 92 heaters zones. The PID system allows you to "soft zone" your heat tunnel giving you the option as to which heaters are attached to which thermocouples. A multiple color display of heat zone configuration provides the operator with a clear view of the heat profile.

Options include the Quick Change Tooling Package, a system designed to simplify tool changeover via rail mounted tool carts and the Irwin Quick Clamp hydraulic tool latching system reducing changeover times by significant amounts. The optional servo driven plug assist (3rd Motion) insures fast and consistent entering of the plug into the sheet resulting in deep draw products with uniform wall thickness and minimum product weight.

The down stream Model 44 Trim Press

compliments the Model 44 former with its high speed and accurate, downstream trimming of a variety of products. Available in standard or reverse trim configuration the Model 44 Trim Press is capable of trimming containers up to 6" deep in a number of sheet types. For cup production you can opt for a Servo Driven Ejector providing fast and consistent part ejection with a low maintenance requirement. The option of Servo Pick gives you a fast and accurate method of indexing each container into trimming position via servo driven wheels and a fiber optic sensor for product locating. The Servo Pick adds to your production rates while reducing the changeover times between tools by relegating stroke and timing changes to a few parameters in the Ballerina Control.

The Model 44 or 44MM can be paired with Model 50NT trim press or Model 44. Vertical trim press for higher speed foam applications and solid sheet trim/stack production.

MODEL 44

Trim Press

Platen motion, chain indexing, plug drive, servo pick, and servo eject axes are all driven by AC brushless servo motors and multi-axis servo drives. Brushless servo motors provide powerful and consistent execution of the motion profile for every axis, guaranteeing full control of the process, giving you a distinct advantage over pneumatic or hydraulic based system.

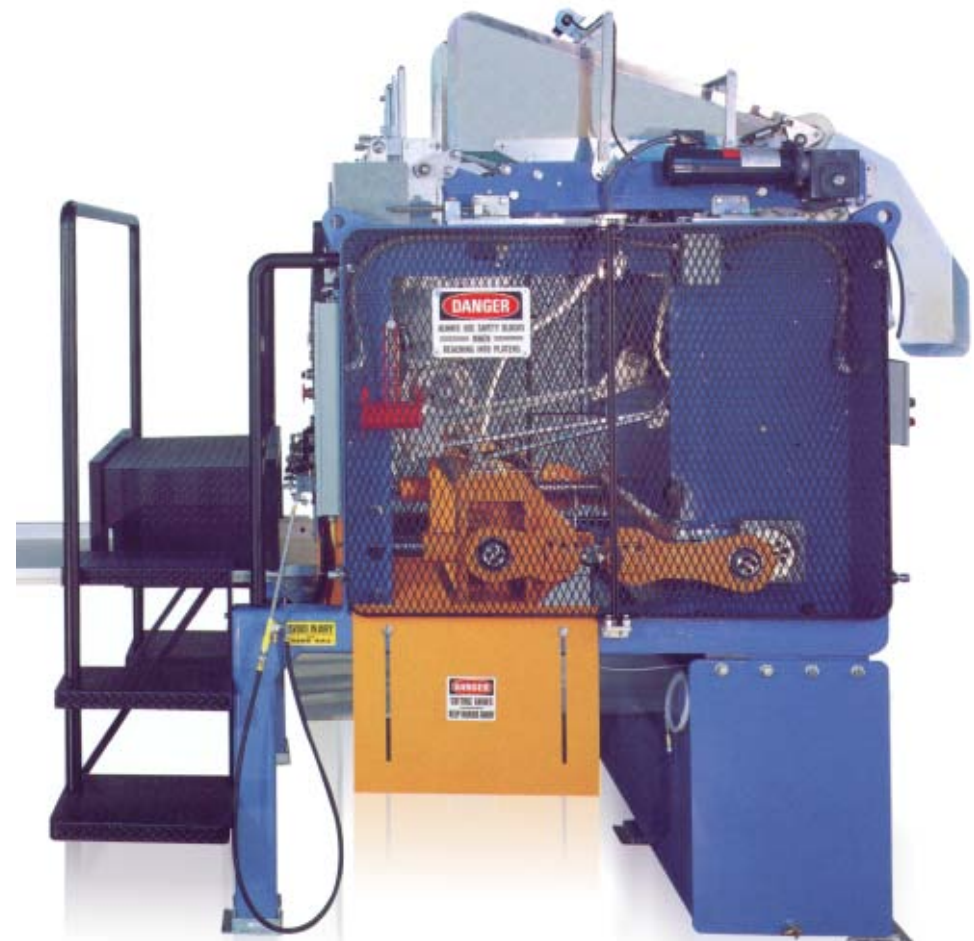
All machine functions are implemented and synchronized by "Ballerina's" Windows® based operating system and unique motion profile control give you a PC-based control that can remain a powerful and flexible process tool that improves as technologies change.

A similar Quick-Change system that minimizes mold change can be used to reduce trim tool change over times and increase safety during the die change.

Once the product is trimmed than one of the Irwin under press "Chesaw" can densify your web scrap in high capacity, quiet low maintenance fashion. The "Chesaw" fits easily underneath the Model 44 Trim Press for space efficient operation.

Both the Model 44 Thermoformer and the Model 44 Trim Press are backed by Irwin Research and Development Field Service Department, the fastest most responsive support team in the industry. In the event of any system failure, Irwin Research and Development will work with you to provide fast, effective solutions, minimizing down time and returning your machine to production.

Count on Irwin Research and Development to continue our long history of using leading edge technologies to engineer and manufacture reliable and innovation thermoformers from our home in Yakima, Washington (USA). Serving our Customers IS Our Business.



MODEL 44

Specifications



Thermoformer Specifications

Material Index	Max. Chain Speed	200'/sec. (5080mm)
	Sheet Width	Max. 46" (1168mm) Min. 26" (660mm)
Heat Tunnel	Length	120"-200" (3048-5080mm)
	Heating Element	Standard: Cal-Rod Optional: Quartz
	Temperature Control	Standard dual control with slaved zones Optional PID Control: +2" at 600°F (.66%) +1 at 316 °C
Former	Sheet Width	Max. 46" (1166mm), Min. 26" (660mm)
	Max. Mold Size	44" Wide (1118mm), 40" Long (1016mm)
	Depth of Draw	Max: 2.50" (64mm) Mini-Mag: 6" (152mm)
	Press Rating	60 Tons
	Shut Height	Standard: 6" (152mm) Optional: Up to 10" (254mm) Mini-Mag: 25" (635mm)
	Platen Travel	3.78" (96mm) Mini-Mag: 6.00" (152.4mm)
Also Available	Model 44 Magnum Former -100 Ton Forming Capacity	

Model 44 Standard Trim Press Specifications

Sheet Width	Max. 46" (1168mm), Min. 26" (660mm)
Product Depth	Maximum 6" (152mm)
Treadle Adjust	Vertical: 6" (152mm), Horizontal: 7" (178mm)
Stroke	Max: 15" (381mm), Min: 5" (127mm)
Standard Platen Opening	Index Direction: 14"-20" (356mm-508mm), Across Sheet: 51" (1295mm)
Maximum Cutting Force	20 Tons
Dry Cycle Speed	1-145 cpm
Servo Ejectors	Optional

Also Available:

- Model 44 Vertical Trim Press
- Model 50 NT Horizontal Trim Press



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