Thermoformer and Trim Press

Research & Development, Inc THE ORIGINAL TECHNOLOGY

11

Thermoformer and Trim Press

When you are looking for versatility, the Irwin Model 28 Former and Trim Press are the choices for 30 inch web width processes. The Model 28 is available in a variety of configurations suitable for nearly every application.

Worldwide, hundreds of Model 28 machines have been delivered to our customers and are providing low cost, reliable, and high-volume production 24 hours a day that yields the advantage needed in the competitive plastics industry. The Model 28 Thermoformer's key to success is based on its flexibility and adaptability. It provides exceptional performance using a variety of sheet types, including APET, CPET, OPS, HIPS, TFPP, and polystyrene foam. The optional Mini-Magnum configuration allows a 6" product depth further adding to the versatility of the machine.

The heat tunnel on the Model 28 may be ordered in lengths ranging from 120" to 220" with the standard tubular heaters as well as optional combinations of tubular and quartz, or all quartz heating elements. The heat tunnel control is via Ballerina through an Opto 22 Mistic system that gives you precise PID control of up to 56 thermocouple zones and





a total of 92 heater 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 heater 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 Quick Clamp Hydraulic tool latching system reducing changeover time by significant amounts.

The Model 28 Former is complimented with the downstream, Model 28 Trim Press or optionally a 28NT Trim Press, which can provide high speed and accurate trimming of your containers. Available in standard or reverse trim configurations the Model 28 Trim Press is capable of trimming a PS foam tray or a thin-gauged, rigid sheet products. For rigid products a Servo Driven Ejector can be opted for over a pneumatic version giving you 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 change over time between tools by relegating stroke and timing changes to a few parameters in the Ballerina Control.

Platen motion, chain index, plug assist, Servo Pick, and Servo eject axes are all driven by AC Brushless motors and multi-axis servo drives. Brushless servo motors give powerful and consistent execution of the motion profiles for every axis guaranteeing full control of the process, giving you a distinct advantage over pneumatic or hydraulic systems.

All machine functions are implemented and synchronized "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.

Both the Model 28 Thermoformer and the Model 28 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 innovative Thermoformers from our home in Yakima, Washington (USA). Serving our Customers IS our Business.



Specifications

Thermoformer Specifications

Material Index	Max. Chain Speed Sheet Width	200"/sec. (5080mm/sec) Max.: 30" (762mm) Min.: 18" (457mm)
Heat Tunnel	Length Heating Element Temperature Control	120" - 220" (3048mm-5080mm) Standard Cal Rod Optional Quartz or aluminum faced panels Standard dual control with slaved zones Optional PID Control +2° at 600°F +1 at 316°C
Former	Sheet Width	30" Maximum (762mm)(762mm)
	Max. Mold Size	28" Wide (711mm), 40" Long (1016mm)
	Depth of Draw	Maximum 2.50" (64mm)
		Mini-Mag 6" (152mm)1
	Press Rating	40 Tons
		(Standard 28)
	Shut Height	60 Tons (28mm) Standard 6" (152mm)
		Optional Up to 10" (254mm)
		Mini-Mag 25" (635mm)
	Platen Travel	3.78" (96mm)
		Mini-Mag 6.0" (152.4mm)

Trim Press Specifications

	Sheet Width	Maximum 30" (762mm)
	Product Depth	Maximum 6" (152mm)
	Treadle Adjust	Vertical: 6" (152mm), Horizontal: 7" (178mm)
	Stroke	Max.: 10" (254mm), Min.: 4.5" (114mm)
	Standard Platen Opening	Index Direction: 14" (356mm), Across Sheet: 35" (889mm)
	Maximum Cutting Force	20 Tons
:	Dry Cycle Speed	1-145 cpm
	Servo Ejector	Optional
)		



P.O. Box 10668 • Yakima, WA 98909-1668 • U.S.A. 2601 W. "J" St. • Yakima, WA 98902

Phone: (509)248-0194 • Fax: (509)248-3503 www.irwinresearch.com • Email: sales@irwinresearch.com