

MODEL 30

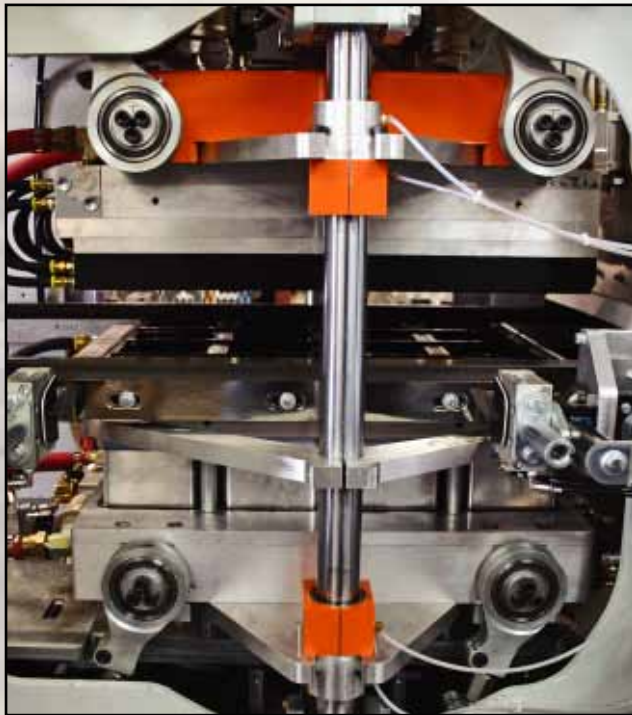
*Thermoformer
and Trim Press*



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

MODEL 30

The Irwin Research and Development Model 30 Thermoformer is designed with continually improving technologies, resulting in a flexible and comprehensive machine for PP, filled PP, APET, CPET, HIPS, OPS, and PS foam processing.



Former Side View

Our patented process control software, "Ballerina", is a crucial part of the Model 30's flexibility, accuracy, and productivity. "Ballerina" is configured for maximum control and power with a Windows 2000 and/or Windows XPE® based operating system that incorporates, in cad-cam fashion, point to point construction of a motor motion profile.

The Model 30 accommodates up to a 32" (813mm) wide mold width for rigid or foam production.

The Former is available in a configuration utilizing a conventional platen set for mold mounting. This configuration is intended for up to 4" (102mm) deep rigid or foam products. A second Model 30 configuration for deep draw products eliminates platens in favor of connecting the former rod ends directly to the mold. This allows for up to 7" (178mm) deep rigid products in a compact and rigid frame. The mold is specifically designed for this application with innovations that provide a drastic reduction in air consumption, positive clamping, and superior cooling resulting in unparalleled

NT Type Mold



process control and forming speeds.

Optional entrance and exit sheet cut off knives offer safe and consistent methods of cutting the sheet in case of tunnel melt downs and in preparing the leading edge for feeding into the trim press. A separate water temperature control system for the chain rails allows a higher degree of edge heat control. For fast and effortless adjustment the chain rails can be moved via an electric motor at the feed drive shaft and via low friction ball bearing ways in the forming station. The former chain rail adjust points allow on "the fly" tapering of the chain rails for use in sag control.

A patented, telescoping heat tunnel, 228" (5791mm) long, has been designed to physically adjust to exact multiples of various tool lengths (shot lengths). The heat control zones relate directly to each shot, insuring that no portion of the shot is subject to overlapped heat. "Ballerina" automatically adjusts the heater zoning in relationship to the shot length setting up the heated length of the tunnel as an exact multiple of the shot length in each and every case.

MODEL 30

Trim Press

The Model 30 Trim Press is another in the line of the highly successfully and patented NT style trim presses. It joins the proven 28NT, 50NT, 50 NT VTS, 36 Magnum NT, 44NT VTS, and Magnum NT. The lightweight, aluminum-cast platen is driven from four points and in turn drives a linear motion treadle with two connecting rods. The platen, treadle, and tooling are counterbalanced to enhance cutting tonnage, platen/tooling parallelism, and press stability at higher speeds. It also features automatic sheet adjust at the canopy feed, servo pick and a self-feed, "auto start" treadle, which allows automatic threading of the sheet into the treadle sheet guides. The optional linear, rack and pinion driven, servo ejector is highly responsive system for use in tap eject and count eject functions. The Model 30 is the answer to your lower speed, high tonnage applications and your higher speed, up to 200rpm, lighter gage applications

The technicians in the Irwin Customer Service Department, the fastest most responsive support team in the industry, back the Model 30. In the event of any system failure, Irwin will work with you to provide fast, effective solutions, minimizing down time and returning your machine to full production.



Servo Index And Guide System



**Dynamically Balanced
Trim Press Drive**

MODEL 30

Specifications

Thermoformer

Material Index	Max. Chain Speed	150"/sec. (3810mm/sec.)
	Sheet Width	Max.: 34" (850mm) Min.: 18" (457mm)
	Cut Off Knife	Optional(Entrance & Exit)
Heat Tunnel	Length	183" - 228" (4648-5791mm)
	Heating Element	5/8"(16mm)Diameter Cal Rods
	Temperature Control	Opto 22, Mistic PID Control: +2° at 600°F +1 at 316°C
Former	Sheet Width	34" Maximum (850mm), 18" Minimum (457mm)
	Max. Mold Size	32" Wide (813mm), 40" Long (1016mm)
	Depth of Draw	Platens 4"(101mm) W/O platen 7" (178mm)
	Press Rating	60 Tons
	Shut Height	W/ Platens 14" (356mm) W/O Platens 18" (457mm)
Platen Travel	8.5" (216mm) Max. Top Platen 8" (203mm) Max. Bottom Platen	

Trim Press

Sheet Width	Maximum 34" (864mm)
Product Depth	Maximum 7" (178mm)
Stroke	6" (152mm) Standard
Maximum Cutting Force	27.5 Tons
Standard Platen Opening	Index Direction 14" (356mm) [20" (508mm) optional], Across Sheet 38.5" (998mm)
Dry Cycle Speed	1-200 cpm
Servo Pick	Standard
Servo Canopy	Standard
Self Feed Treadle(Auto Start)	Standard
Counter Balance Platen Motion	Standard
Shut Height	6" (152.4mm) to 13" (330mm)
Platen Stroke	4" (101.6mm) to 10" (254mm)
Servo Ejector	Optional (Linear Rack/Pinion)

Entrance Cut Off Knife



Exit Cut Off Knife



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