

wifag//polytype group

F88 – precision in every situation



The large platen universal
thermoformer for shallow products



//polytype
OMV

Two versions for different types of products/materials

The F88 is an automatic large-size (forming area: 1280 x 750 mm) thermoformer, whose special feature is its modular configuration. The F88 can be supplied in two different versions:



Single Station/In-mould Trimming (punch-and-die moulds), to produce plates, trays and lids in PS, PP, PLA and other biodegradable materials. In this version, the F88 machine features one-only forming and cutting station, where the products, after the forming phase, are partially trimmed. Trimming is performed along the full outer contour of the formed product, except in few points, where the product is still connected to the web. Then the products, hanging to the web by the said points, can thus be easily removed from the mould, exploiting the web motion. Subsequently the products are detached of the web, stacked and counted. Finally the stacks are transversally switched onto a motorized unloading conveyor.

The advantages of the above forming and (partial) cutting system are paramount:

- // Absolute cutting precision, thanks to the in-mould-trimming technique
- // Long duration of the cutting edges, thanks to the punch-and-die tool easy removal of the products from the mould, as the products are connected to the web by few points
- // Perfect cooling/stabilization process for the products, since they can freely cool down, without receiving any torsional stress from the web, given the minimum size of the "support" points.

SELECTION OF MOST WIDELY USED PRODUCTS – CHARACTERISTICS

| SHAPE | PRODUCT | CAVITATION | WEIGHT (G) | CPM | PCS/H |
|--|--------------------------------------|------------|------------|-----|--------|
|  | PS 220 mm plate (5 x 3) | 15 | 8.2 | 46 | 41.400 |
|  | PS 210 mm plate (5 x 3 L) | 15 | 7.5 | 46 | 41.400 |
|  | PS 170 mm plate (6 x 4 L) | 24 | 4.7 | 46 | 66.200 |
|  | PET 190 x 130 mm Hinged fruit box | 30 | 20 | 31 | 56.000 |

3



Technical Specifications of THERMOFORMER - In Mould Trim

| | | |
|---|---------------------|---------------------------------------|
| Materials | PS - PP - PET - PLA | |
| Max. forming area | mm | 1.280 x 750 |
| Max. sheet width | mm | 1380 |
| Sheet thickness | mm | 0,15 - 1,00 |
| Max. forming depth | mm | 50 (90) |
| Max. positive forming | mm | 15 |
| Forming with compressed air | bar | 6 |
| Cycles | strokes/min 46 | |
| Oven size | mm | 3.000 x 1.450 |
| Mould closing force/Cutting Force | daN | 60.000 |
| Max. cutting length | mm | 15.000 |
| Max. air consumption (H. 50) | NI/min. | 12.000 |
| Max. cooling required (at 8°-10°C) x PS | kcal/h | 35.000 (Mould) 32.000 (Roll Stack) |
| Max. vacuum consumption (opt.) | m ³ /h | 180 |
| External dimensions | mm | 5.500 x 2.400 x 3.200/h |
| Total installed motor power | kW | 75 (without oven) |

According to the type of material used, and to the machine configuration (in-line, off-line), the F88 can be equipped with an integrated cooling/ stabilizing roll-stack, and with a top-panel or a sandwich (top+bottom)oven.

Multi Station/Separate Trimming (steel-rule cutting moulds or punch-and die moulds), to produce trays, baskets, plates, boxes etc. in PET, PS, PLA and other biodegradable materials. In this version, the F88 features a forming station, an optional hole-punching station and a trimming station by steel-rule cutters. The products, after being formed at the first station, can be (optionally) hole-punched for venting purposes.

Then the products reach the trimming station where they are partially trimmed, according to the same technique explained at point a). Exploiting the web motion, the products are

removed from the trimming station and afterwards detached of the web, stacked and counted. Finally the stacks are transversally switched onto a motorized unloading conveyor.

The clear advantage of this system is assuring high product outputs with a reliable and simple ejection/stacking device, using either traditional punch-and-die tools or inexpensive steel-rule-cutting moulds. The optional punching station, provides for the venting-holes on-board punching facility, without any need of additional downstream equipments.

Polytype AG

26, route de la Glâne
CH-1701 Fribourg/Switzerland

Phone +41 26 426 11 11

info@polytype.com
www.polytype.com

OMV MACHINERY S.R.L Italy

Lungadige Attiraglio 67
I-37124 Parona - Verona/Italy

Phone +39 045 83 94 444

info@omvgroup.com
www.omvgroup.com

SWITZERLAND

WIFAG-Polytype Holding AG
Fribourg/Switzerland

WIFAG-Polytype Technologies AG
Fribourg/Switzerland

Polytype AG
Fribourg/Switzerland

GERMANY

Mall + Herlan GmbH
Pfinztal/Germany

Mall Herlan MB GmbH
Neuhausen ob Eck/Germany

WIFAG-Polytype GmbH
Hamburg/Germany

ITALY

Mall + Herlan Italia S.r.l.
Seriata (BG)/Italy

OMV Machinery srl
Verona/Italy

AMERICA

Polytype America Corp.
Mahwah, NJ/USA

ASIA

WIFAG-Polytype China Ltd.
Hong Kong/China

**Wifag-Polytype India
Marketing Private Ltd.**
New Delhi/India

Polytype Asia Pacific Co., Ltd.
Chachoengsao/Thailand