

Fully automatic from plastic resin to finished product packed in boxes

- Impeccable part trim concentricity due to high precision in-mould punch & die cutting technique
- High speed forming of deep-draw containers
- On-board Rim-rolling device option available



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E76 – the wild one



The E76 is a fully automatic, servo driven, thermoforming machine. The in-mould trim eliminates issues caused by post forming shrinkage and ensures accurate, clean concentric trimmed parts from cycle to cycle and run to run. The E76 has been designed to process all types of thermoplastic and multilayer, co-extruded materials.

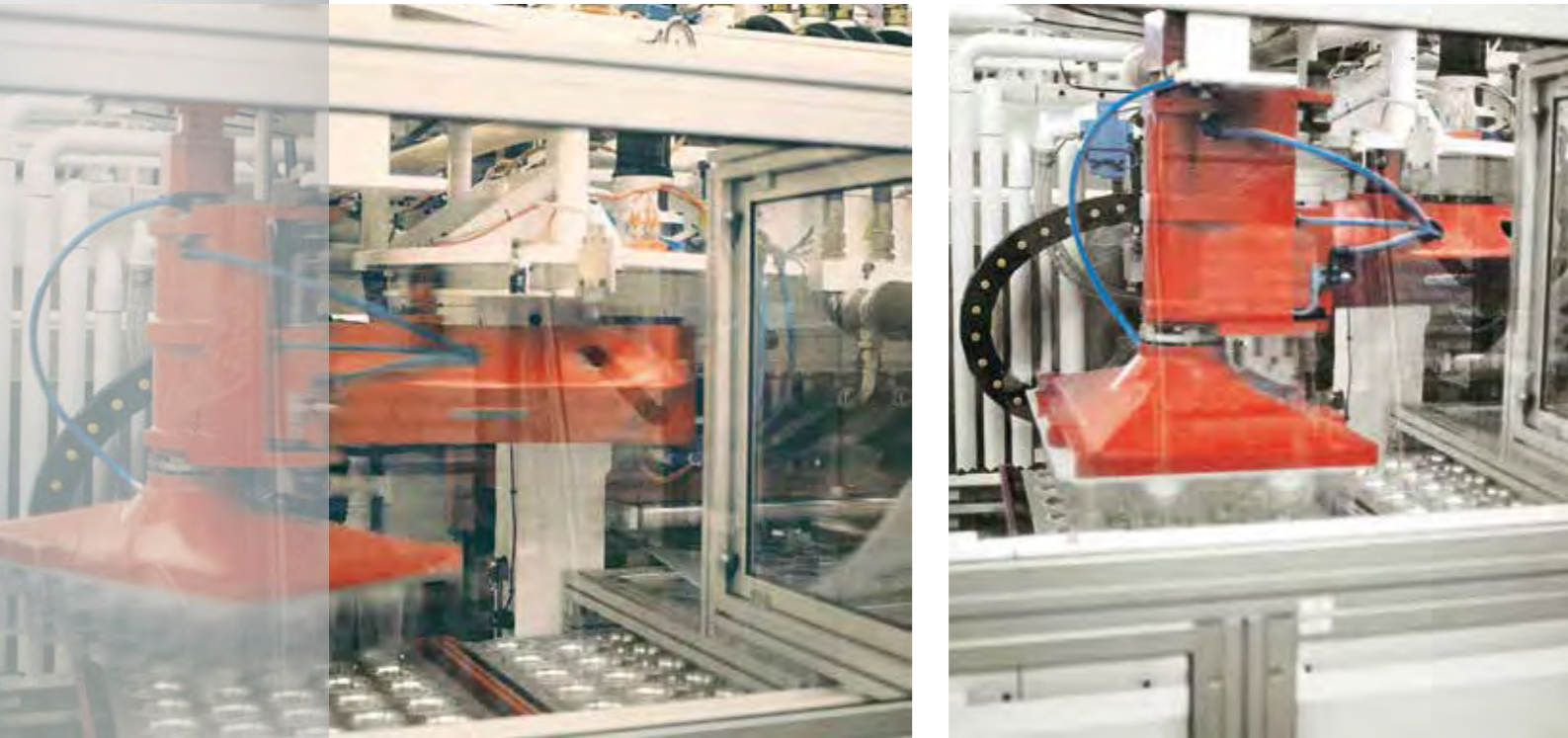
OMV's patented "Shuttle Mould" forming technology delivers higher production rates even for semi-crystalline materials



High speed process with tight tolerances even when forming polyolefin materials

OMV's unique Shuttle-Mould system ensures longer cooling times to minimize post shrinkage of the parts and without reducing valuable cycle-speed

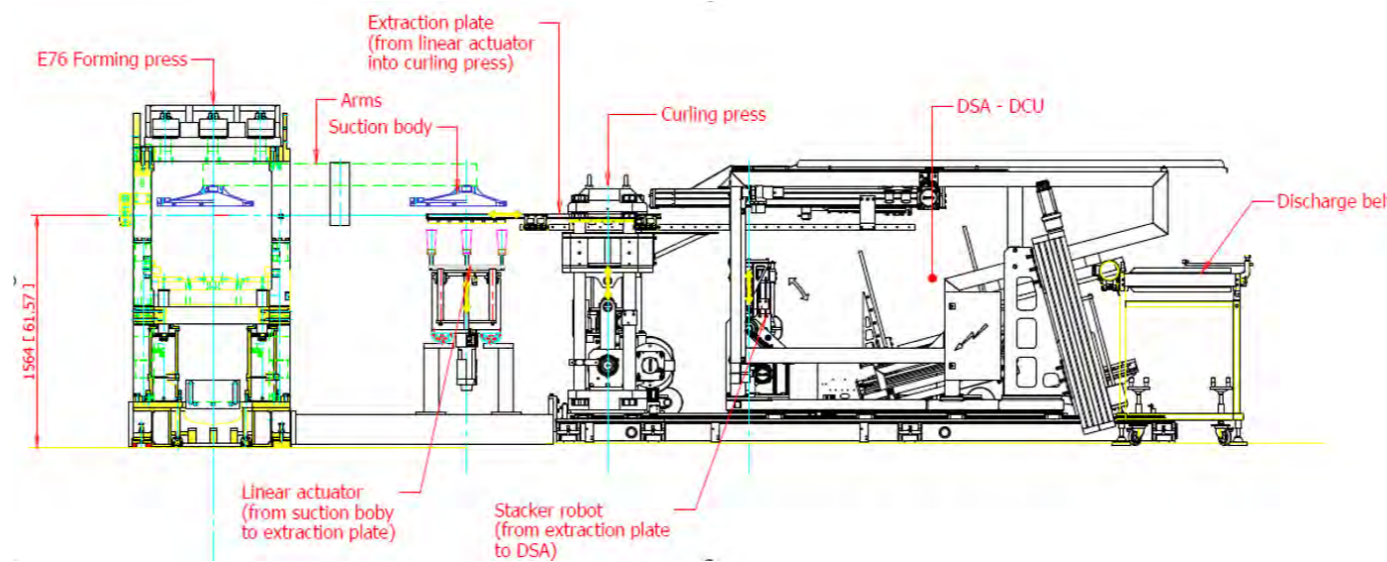
This ensures improved handling, stacking, and conveying for a wide range of products



The E76 features OMV's unique "Shuttle Mould System" which allows for a longer cooling process without sacrificing valuable cycle time. 3.5 times more efficient cooling of parts than other thermoforming machines. This platform was specifically developed for materials like polyolefins that require longer cooling times. This system, due to its reduced opening stroke of the forming press, allows for the forming of homo polymer polypropylene with cycle speeds as high as that of forming High Impact Polystyrene

The E76 Former also affords the option to add the OMV's on-line Rim-Rolling System. This eliminates the need for the inefficient, generic off-line rim rolling systems as well as the excessive handling of parts. Instead, OMV's unique method of rim rolling utilizes the latent heat from the form station to roll the rims without reducing cycle times. This method ensure consistent quality rim rolled parts

New Hybrid E76-R



The New Hybrid 76-R Former eliminates the carrier-transporter trays, which is replaced with a single rim rolling station and the latest Model RM77 style high speed stacking system. The stacking magazine and exit conveyor is slanted back for control of shallow parts and lids. All Hydraulic systems are replaced with Servo driven systems for higher run efficiencies with lowest possible energy usage.

The new Hybrid E76 is designed to accommodate all older E76 tool sets, with some minor additions

Forming station

Trimming of the parts in the form station is achieved with the use of eccentric cams situated directly under the toggle base and operated by the new electro mechanical actuator.

This allows for extremely accurate pre-cut and final cut positions

Mould assembly includes a fixed upper tool half incorporating the plug assist, form air pressure and coining device, while the lower tooling consists of a shuttle table on which the two lower female tool halves are mounted (Shuttle Mould System) Two groups of vacuum extraction plates, taking the products out of the mould and conveying them to a central collection system.

Pneumatic, quick connect mould clamps and cooling ports ensure faster tool changes

Plug-assist

High speed and robust Servo driven plug-assist ensures accurate pre-stretching of sheet with the capability to form colder sheet for biaxial stretching benefits. Timing, Speed, ramp and all other plug assist functions can be adjusted real time within password protected Operator screens

Index drive

Servo driven pin chain allows for accurate and efficient control of sheet index stroke with real time adjustments directly from HMI Operator control screen. Index layover graphic shows actual position of each index as it passes through the oven zones and to the form station

Oven

C-shape oven with top and bottom ceramic heaters arranged in lateral and longitudinal zones for accurate sheet temperature control. Smart operator interface to ensure easy setup and troubleshooting of oven zoning

SELECTION OF MOST WIDELY USED PRODUCTS – CHARACTERISTICS

Shape	USE	Dimension mm	Depth mm	Weight gr	Content	PS / ABS / PVC		
						Cavities	Cycles	Prod. p. hour
	COFFEE CUP	Ø 58	60	3	100 CC	76 S	30	136.000
	DRINKING CUP	Ø 71	94	4,5	200 CC	60 S	30	108.000
	DRINKING CUP	Ø 78	102	5,5	300 CC	45 S	29	78.000
	YOGURT CUP	Ø 75	184	6,5	200 CC	53 S	26	82.680
	YOGURT CUP	Ø 97	119	16	500 CC	30 S	23	41.000
	DELI CONTAINER	Ø 116	150	18	960 CC	20	22	26.000
	ICE CREAM CUP	Ø 146	102	24	1000 CC	12 L	23	17.000
	MARGARINE TUB	Ø 101	58	7	250 gr	30 S	26	47.000
	MARGARINE TUB	Ø 120	76	13	500 gr	20	25	30.000
	MARGARINE EUROTUB	129 x 87	45	10	250 gr	21	26	33.000
	MARGARINE EUROTUB	142 x 92	65	17	500 gr	18	25	27.000
	TRAY	120 x 120	30	6,8	-	15	29	26.000
	TRAY	120 x 180	30	10	-	10	29	17.000

Technical Specifications of E76 THERMOFORMER - In-line System

Materials	D 140	HIPS - PP - ABS - HDPE
Gross output HIPS	kg/h	1.240 - 1.340
Gross output PP	kg/h	1.100 - 1.140
Sheet thickness HIPS	mm	0,2 - 2,2
Sheet thickness PP*	mm	0,4 - 2,2
Extruder size	mm	140
L/D ratio for water/air cooled	mm	33/1
Extruder motor power	kW	386
Max. screw rev.	Rpm	160
Flat die width	mm	950
Lip opening	mm	0,2 - 2,5
Gear pump capacity	cm³/turn	371
Calender roll diameters (Upper-Middle-Lower)	mm	383 - 500 - 500
Pull roll diameter (haul-off)	mm	238
Rubber roll diameter	mm	200
Effective rolls width	mm	1.000
Max. cooling required (at 8° - 10°C)	kcal/h	208.800
Total installed motor power	kW	828
Total installed heating power	kW	422

*PP Sheet thickness can be reduced to a minimum of 0,2 mm with the additional air knife (optional)

Technical Specifications of E76 THERMOFORMER - In Mould Trim

Materials	PS - PP - ABS - PE
Max. forming area	mm 760 x 540
Min. forming area	mm 400 x 250
Max. sheet width	mm 820
Sheet thickness	mm 0,2 - 2,5
Max. forming depth	mm 150 (180)
Max. positive forming	mm 10
Forming with compressed air	bar 6
Dry cycles	strokes/min 35
Oven size	mm 2.410 x 1.010
Mould closing/cutting force	daN 80.000
Max. cutting length	mm 17.800
Max. air consumption	NI/min. 15.000
Max. cooling required (at 8°-10°C)	kcal/h 72.000
Max. vacuum consumption	m³/h 160
External dimensions	mm 9.000 x 15.100 x 3.200
Weight	kg 36.000
Total installed motor power	kW 139
Total installed heating power	kW 159