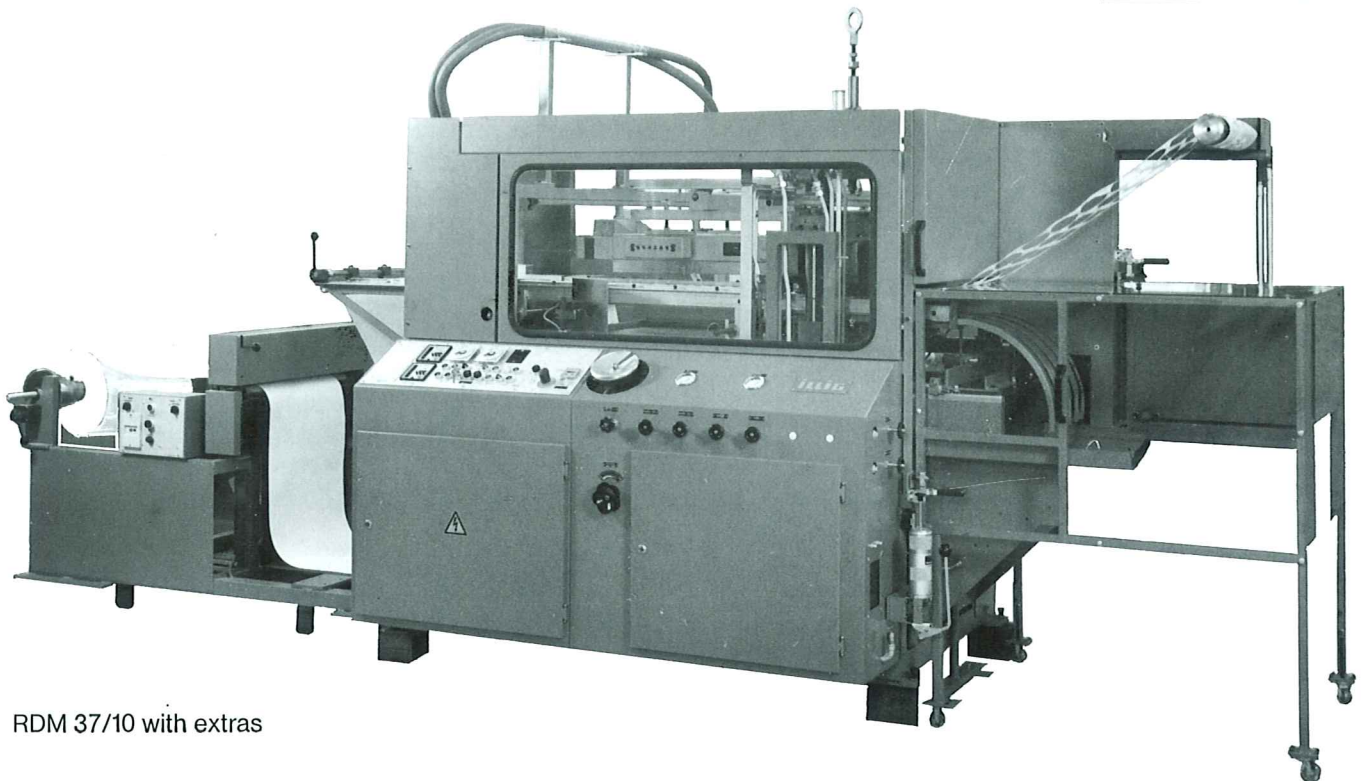
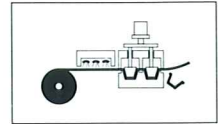


Machines and tools for thermoforming and packaging technology

Sheet processing machines
Automatic roll-fed thermoformers
for forming/punching tools
Automatic roll-fed thermoformers,
separate forming and punching,
Skin and blister packaging machines
Form, fill and seal lines
ILLIG-produced tooling

illig®

Automatic high-
speed pressure
former RDM 37/10



RDM 37/10 with extras



Technical Data

RDM 37/10

Maximum forming area	mm	475 x 250
Maximum material width	mm	495
Maximum feed length	mm	280
Maximum mould closing force	daN	6000
Maximum depth of draw	mm	100
Maximum roll diameter	mm	1200
Connected load – top heater	kW	9.5
Connected load – bottom heater	kW	6.9
Conducted heat – top heater	kJ/h	~ 10260
Conducted heat – top and bottom heater	kJ/h	~ 17715
Total connected load without bottom heater	kW	11.3
Air requirement per cycle at 6 bar	l	100
Approx. cooling water consumption	m ³ /h	1.0
Machine length with stacking chute & roll	mm	approx. 5670
Machine width	mm	2220
Machine height maximum	mm	2100
Machine weight	kg	approx. 2000

Standard colour white/blue RAL 9002 and RAL 5013

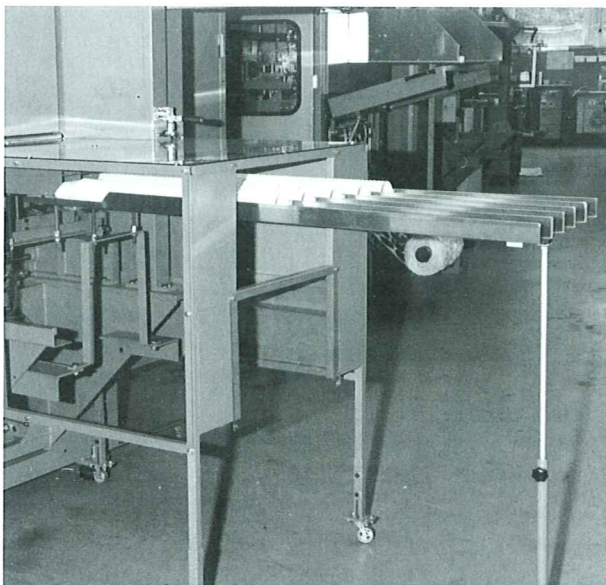
Efficient High-speed Pressure Former RDM series

The high-speed pressure former represents a system that is suitable for manufacturing packaging items, e.g. cups, containers, snap-on lids and similar items from roll stock and at the same time offering a high degree of repetitive accuracy. The major advantages of this well-proven machine concept are high output with low energy consumption as well as a high degree of maintenance-free service life.

Machine construction

The machine is fully automatic. Forming takes place by compressed air using mechanical pre-stretching. The double chain transport system transports the material drawn off the material roll through the heater zone into the forming station. For female parts a depth of draw of 100 mm applies, for male parts the depth of draw is up to 20 mm. For the forming station there is an electro-mechanical drive unit featuring a cam. The drive shaft is equipped with adjustable cams controlling the forming sequence. As an option we also offer a coding disk control system which replaces the cam control system, and this can be adjusted while the machine is running. To manufacture some special items, e.g. cups with inverted bases or rimless items we can offer various additional units.

Combined forming/punching tools are used. The finished articles are systematically transferred to horizontal stacking chutes. The skeletal waste is fed to the automatic rewind unit.



Stacking device with stacking chutes

Roll stand

The material roll stand is installed in front of the actual forming machine. The material roll shaft, which is equipped with two axially adjustable clamping cones, takes rolls up to 1,200 mm diameter. The material is drawn off from the automatic material unreeling device. To avoid uncontrolled overrun of the material roll there is mechanical braking of the material roll shaft.

As an option a pneumatically operating brake and also a pneumatically operating material lift-in device are available.

Material transport

Maintenance-free sprocket wheels index the material through the heating zone into the forming tool. The handling of the material by means of the sprockets is facilitated by a servomotor and the transport as such is actuated by pressing a button. The transport feed can be adjusted at a rocker arm, which is controlled by a cam. The guide rails of the transport unit are cooled in the heater area, the index feed can be adjusted manually by means of spindles. By means of an additional device – automatic start – it is possible to manufacture correctly formed items right from the very first forming cycle. This device simulates the machine start-up, forward feed and heating time without operating the forming station and, after running of the pre-set start cycles, it provides correctly heated material.

Heaters

The standard equipment includes a top heater featuring full area control. The heater is made up of infra-red ceramic heater elements. There is longitudinal row control of the heater elements as well as a lower heater with full area control and material sag control, which are useful additions. The longitudinal row control also gives optimum heating of the outer material area.

Forming station

The forming station is driven by means of an infinitely variable geared brake motor and a cam. The movable lower platen is guided in long guide bushings. By means of a central adjustment of the lower platen the cutting depth of the tool can be adjusted. The tools used are of the combined forming and punching type. A pneumatic clamp ring control system is included as standard and this serves to move the clamp rings in the upper tool. This feature enables the cup rim to be kept flat. For precise control of the temperature in both the top and the bottom tool halves a temperature control unit is available as an option.