

Packaging Systems

The background of the entire page is a photograph of a large industrial blister packaging machine. The machine is primarily blue and silver, with various mechanical components, rollers, and safety barriers visible. The lighting is bright, highlighting the metallic surfaces and the complex structure of the machinery.

Since 1970, Hoonga has been persistent in its efforts to supply packaging systems in global markets, keeping up with fast changing trends and customers' needs.

Continuous development and creative thinking enable Hoonga to provide innovative solutions and applications for automatic packaging systems.

Blister Packaging Machine

HM 400P

HM 400P

HM 400P is capable of outputting at maximum of 400 blisters per minute even within a confined space. It boosts operation speed of 200 cycles per minute for punching with dual lane architecture and trouble-free driving mechanism permits exceptional productivity.

Industry Standard PC Control System

Innovative production management and operations are made possible by incorporating an industry standard PC control system with a color LCD touch screen. Controlled access to the machine is provided by assigning user accounts in order to heighten the security level involved with production. Audit trails allow supervisors to monitor the status of the machine and production by inspecting chronological operation records. The system is also capable of providing self diagnosis and detailed trouble shooting reports. The fastest format changeover is enabled through simple mechanical tool changes followed by selecting preset parameters of a specific format on the control system. Servo drives and the PC control system fully automate the operation and provide accommodating environment for inexperienced operators. The entire operation manual is stored in the PC control system for the operator's convenience.

Self-Adjusting Indexing

Servo motor drive technology is embedded in three separate zones for an individual indexing operation. Both Forming and Sealing Stations consist of servo motor controlled grip-moving systems. A fast driving zone which is a combination of Emboss Coding, Perforation and Punching Stations, also utilizes servo motor controlled rotary indexing system.

Easy and Fast Format Mold Changeover

Self-adjusting indexing with servo drives and the tool-less changeover design for mold sets contribute to easy and fast format mold changeovers in approx. 20 - 30 minutes.

Compact Footprint

Unlike HM 400P's high output, it only occupies the minimum space in a clean room. Ergonomic design of this compact machine allows easy access to electrical and mechanical driving sections.

GMP Compliant Design

Balcony construction with the slope bottom, clean and simple composition of stations and frameless safety doors allow easy and fast cleaning which minimize dust accumulation.

Material Flexibility

HM 400P handles a wide selection of blister packaging materials including all conventional thermoforming materials such as PVC, PVC/PVDC, PVC/ACLAR and COC along with aluminum for cold forming.

Feeding Zone

Separation of the feeding zone from the production and driving zone minimizes cross contamination and eliminates any vapor.

Platen Sealing

A platen sealing mechanism is operated by servo motor drive technology for optimum sealing and maximizing speed. It presents more freedom for the blister pack design and performs challenging sealing types such as Alu/Alu blistering with large cavities. Indexing incorporates a grip-moving self adjustment system.



Fast Driving Zone

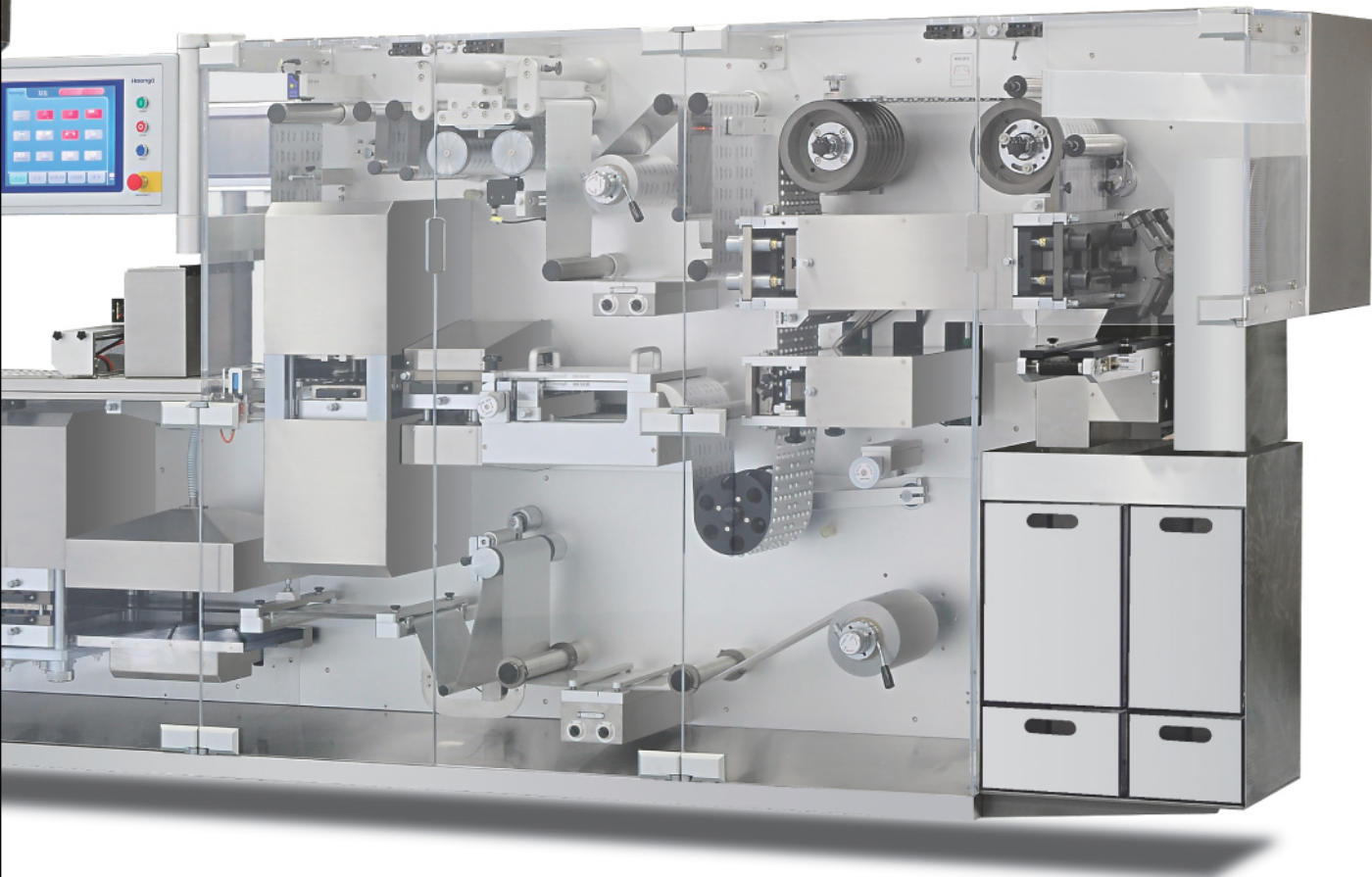
Perforation, emboss coding and punching stations are controlled by servo driven rotary indexing system. Its design occupies less space with smaller format molds. This fast driving zone operates at the maximum of 200 cycles per minute.

Convenient Integration to Downstream

Punched blisters are transferred by a discharge wheel and positioned onto the discharge conveyor with upmost pace and accuracy. A discharge direction can be assigned towards the front and back sides of the machine for flexibility and convenient integration with the downstream cartoner.

Options Available on HM 400P:

- Various feeding systems applicable as per different products, packaging materials, etc.
- Product feeding elevator from floor level
- Chamber of feeding zone for closed air control against over and under pressure
- Vacuum devices for dust in feeding zone
- Visual inspection system to detect blister pockets which are empty or filled with irregular shaped products
- Pinhole detection system for aluminum cold forming material
- Print registration control system for lid material
- In-line printer either flexographic or laser printer
- Coding by ink-jet, laser-jet, etc.
- Bar code reading printed on lid foil
- Printer connection to integrated PC control system
- Modem connection to integrated PC control system for remote operation management
- In-line facilities for downstream automations





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1. Forming Station

Either thermoforming and/or cold forming can be implemented at Forming Station. Thermoforming is performed by means of air blowing on a heated film and such process allows material flexibility. Cold forming is carried out by the plug assist mechanism.

2. Feeding Section

Various feeding systems as per the product shape and character can be installed. Shift feeder leads to the best efficient filling for specific products shapes.

3. Platen Sealing Station

It is operated by servo motor drive technology which contributes to the flexibility of blister design. Such technology entails an intermittent motion for the feeding system

4. Print Registration Control System

This device controls stretching force of lid foil regularly to match the printing information on the pack by examining eyemark positions.

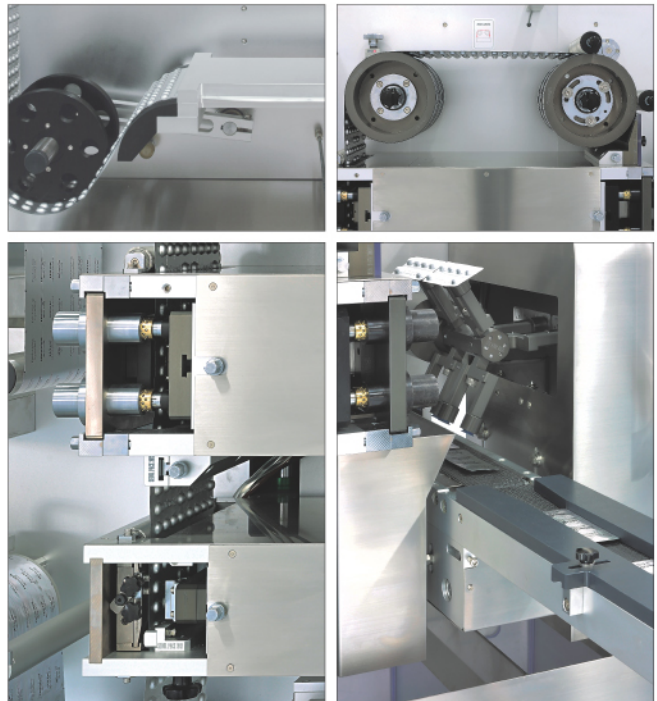
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5. 6. 7. Self-adjusting Indexing System

The position of the film is read and corrected at each index by servo motor drive. The forming zone has individual servo-driven grips which assist the indexing system. Emboss Coding, Perforation and Punching Stations are controlled by servo-driven rotary indexing system.

8. Punching & Discharge

Horizontal punching system produces a more precise individual ejection and supports easy intergration and interface to catoner. A discharge direction can be assigned towards the front and back sides of the machine. Various discharge options are available for increased flexibility with an installation floor plan and a downstream machine.





*Fitting inconstant production schedule,
Highly effective productivity,
Absolute production management,
Simplest operation required,
Conformity to advanced GMP directive,
On compact floor space.*

ISO 9001: 2000 / ISO 14001

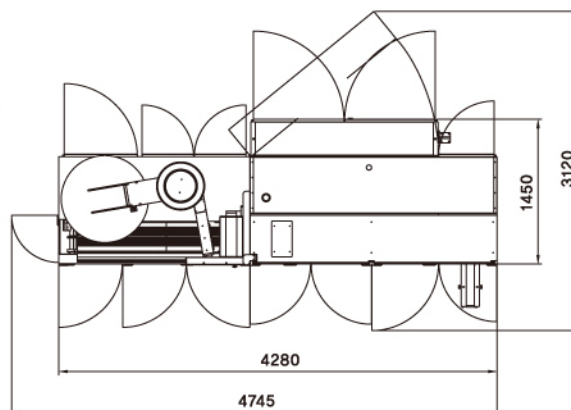


Featuring HM 400P lined up with horizontal cartoning machine, HC 150.

TECHNICAL DATA

HM 400P

Output	max. 400 blisters /min. in dual lanes	
Operation speed	Thermo forming	min. 15 ~ max. 70 cycles / min
	Cold forming	min. 15 ~ max. 50 cycles / min
	Punching	min. 50 ~ max. 200 cycles / min
Forming format range	Width	min. 60 ~ max. 270 mm
	Index	min. 30 ~ max. 200 mm
	Depth	max. 12 mm
Punching format range	Width	min. 60 ~ max. 260 mm
	Index	min. 30 ~ max. 100 mm
Packaging material	Forming material	PVC, PVC/PVDC, PVC/ACLAR, COC, PET, Alu forming material, etc.
	Lidding material	Alu-hard / soft, Child resistant lid foil etc.
Utilities	Electric power connection	380V, 3-Phase, 50 / 60 Hz (Other voltages available upon request)
	Electric consumption	18 KVA
	Compressed air pressure	6 ~ 8 bar in 10% fluctuation
	Air consumption	370 NL / min.
Machine dimensions	Length	approx. 4,280 mm
	Width	approx. 1,450 mm
	Height	approx. 1,800 mm
	Weight	approx. 3,500 kgs



Contents on this catalogue are to assist understanding of the machine only and are subject to technical modifications without prior notice. The final specification is as per our quotation offered to you exclusively.

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