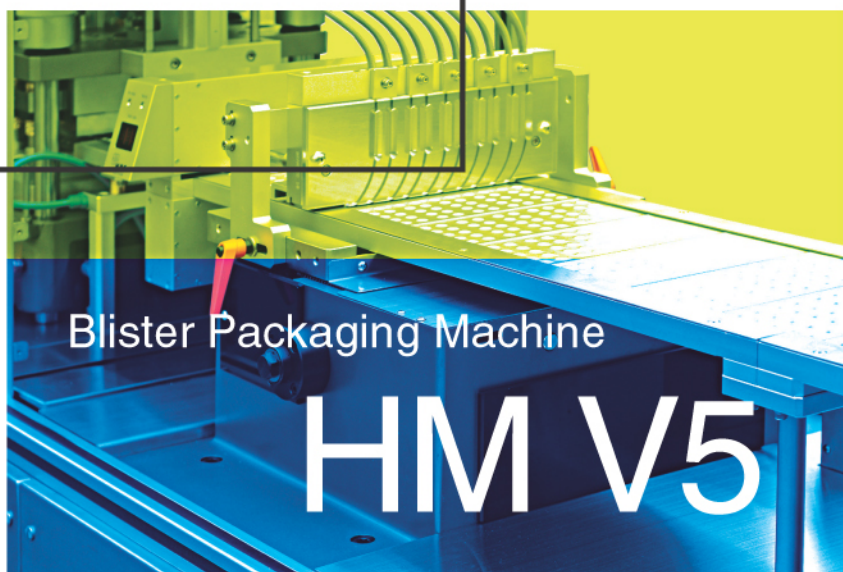


Packaging Systems

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 V5

HM V5

HM V5 is designed for ease and simplicity of operation with flexibility for blister packaging for pharmaceutical blister in thermoforming and cold forming. It features user friendly MMI (Man Machine Interface) control system by PLC with a touch screen, driving by heavy duty spline shaft, exterior panel by stainless steel and every station made by aluminum to meet GMP conception. Safety design is followed CE regulation.

HM V5 consists of :

- Form film supply stand. Optionally with spare reel stand with splicing table.
- Direct contact type pre-heating plate, teflon coated.
- Thermoforming. Optionally mounted Cold forming (Alu/Alu) or plug assist forming facility.
- Extensive feeding bed to install various automatic feeding systems, product inspector and tear detector and so on.
- Lid-foil supply with tension control and exhaustion sensing.
- Sealing station integrated with code embossing.
- Sealing upper plate lift-up system on machine stop. (option)
- Slitting station applicable for perforation or hole punching.
- Draw-off operated by mechanical cam drive with lever.
- Punching station.
- Discharge conveyor.
- Waste winding spool.

Machine features :

- Blister packaging for the most of solid products, such as tablet, hard gelatin capsule, soft gelatin capsule, caplet and any similar products are applicable with various kinds of optimum designed automatic feeders.
- Forming material applicable to all kinds of common thermoforming materials, such as PVC, PVDC, ACLAR and PET, and cold forming material, aluminum film.
- Lid foil material applicable to aluminum, paper, multi-layer foil for child proof and so on.
- MMI control via PLC and touch screen for friendly operation. It controls general operation function, and display not only trouble shooting, machine running speed, production quantity, production target quantity control but also lots of parameter information as per each product and format mold.



- Fast format mold change by one-touch and tool-less design.
- Simple switching of operation of thermoforming and cold forming by switch selection on the touch screen with format mold change, without any mechanical construction change.
- Every station is actuated by mechanical cam drive on the strong solid spline shaft driven by motor controlled by inverter.
- Each station is settable by dial indicator.
- Chiller for automatic temperature control and re-circulation. (option)
- Complete safety panel guard with safety interlocks.
- Centralized lubrication panel.
- Format molds are designed one touch setting for fast and easy change over.

Automatic feeding facilities :

- Hopper with vibrator
- Tablet alignment system by spiral track with vibration
- Universal brush box feeder
- Shutter gate feeder
- Vibrating tube channel feeder for a convex tablet
- Track feeder
- Shift feeder

Optional facilities:

- Alignment facility for In-line with downstream cartoner
- Movement system for feeding tracks
- Product feeding inspector by Camera system (black and white or color), optical sensor or mechanical system
- Tear detector by infrared back light inspection for not only cold form but also lid foil
- Rejection of an inferior blister
- In-line printer for lid foil
- Print registration control system
- Vacuum and/or plug assist forming
- Waste chopper instead of spool winder
- Steel-It paint
- Documentation of I.Q., O.Q. and P.Q.





1. Form film stand

Form film stand with spare reel and splicing table. Mechanical automatic centering chuck applied.

2. Forming station

Thermoforming station which is capable to be mounted cold forming (Alu/Alu) or plug assist forming facility. Direct contact type pre-heating plate, teflon coated, designed double steps for fast and good quality of forming. Pre-heating plate may operate beforehand starting automatic operation not to skip first stroke. Film stopper is installed to work in machine stop.

3. Feeding section

Various feeding systems as per the product shape and character can be installed and also, tear detector, feeding inspector are applicable on the bed.

4. Sealing, cooling and slitting station

Sealing upper plate can be installed lift-up system in machine stop. Slitting station can be applied for perforating or hole punching purpose.

5. Draw-off system and punching

Draw-off system is composed two grippers, fixed and moved, designed in easy setting conception and dial indicator. Punching station with pick and place device for alignment of blister packs for in line to downstream.

6. Waste chopping system

Waste chopping instead of winding spool to operate machine without machine stop.

7. Product inspector

Camera inspection system installed after feeding operation.

8. Pin hole detector

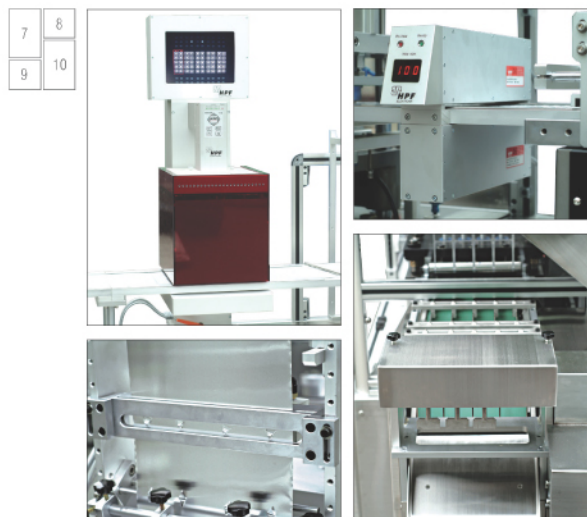
Infrared pin hole detection system can cover for aluminum foil after forming or lid aluminum foil.

9. Tear marking

Tear marking on the lid foil of detected blister.

10. Discharge

Discharge via conveyor belt after punching is capable to install inferior blister rejection and alignment for in-line to downstream facility.





Performance with extreme flexibility for small batch production of pharmaceutical blister package

ISO 9001: 2000 / ISO 14001



Feature of HM V5 / Blister packaging Machine

TECHNICAL DATA

HM V5

Output	Thermo forming	min. 20 ~ max. 60 cycles/min
	Cold forming	min. 15 ~ max. 35 cycles/min
Forming format range	Width	max. 210 mm
	Index	max. 140 mm
	Depth	max. 12 mm (Alu/Alu : max. 10 mm)
	Effective area	202 mm width x 138 mm index
Packaging material	Forming material	PVC, PVDC, ACLAR, COC, PET, Alu forming material, etc.
	Lidding material	Alu-hard / soft, Child Resistant Lid Foil, etc.
Utilities	Electric power connection	220V, 3-phase, 50/60Hz (other voltages available on request)
	Electric connection	15KVA
	Compressed air pressure	6 bar within 10% fluctuation
	Air consumption	240 NL/min
Machine dimensions	Chilled water	240 L/H in automatic circulation by installed chiller
	Width	approx 950 mm
	Length	approx. 5,180 mm
	Height	approx. 2,175 mm
	Weight	approx. 2,600 Kgs

Words and photographs on this catalogues are to help understanding of the machine model only and subject to technical modification without prior notice. The final specification is as per our quotation offered to you exclusively.



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