

HICAPSEAL

Fully Automatic Hard Capsule Sealing Machine

40/100

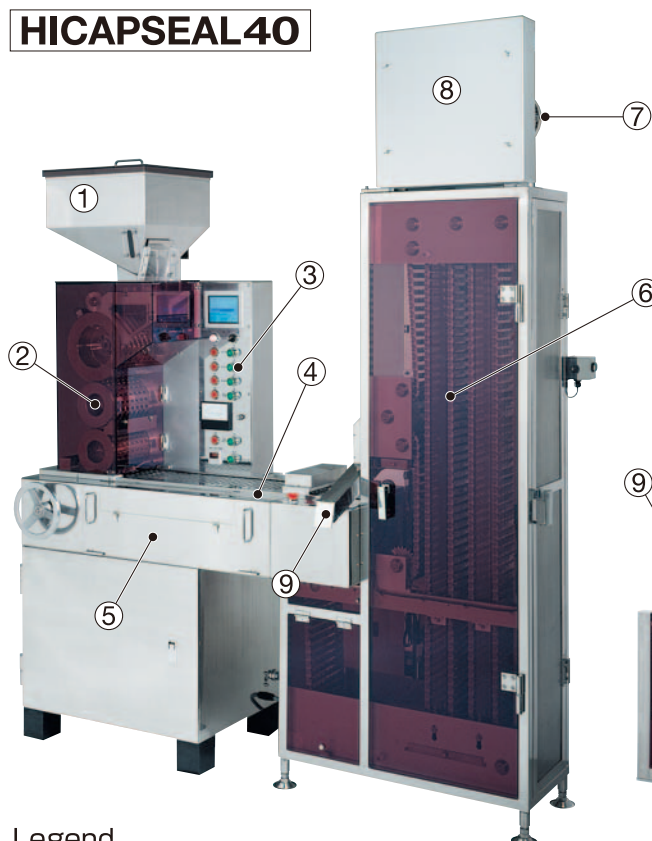


HICAPSEAL 40/100

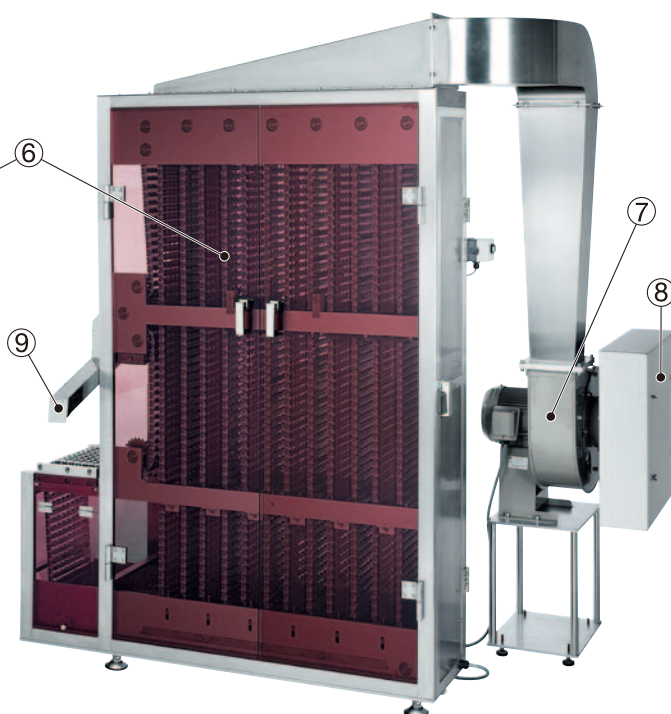
Fully Automatic Hard Capsule Sealing Machine

Qualicaps has been supplying for many years high quality hard capsules that satisfy our customers' needs. Capsules can be filled with many different types of materials ranging from dry solids to non-aqueous liquids. In the last few years there has been an increasing interest in filling liquid formulations. To meet this need, our capsule sealing machine was developed to hermetically seal liquid filled hard capsules at high speed. Our current machine, the HICAPSEAL 100, has been used all over the world. Since its launch our sealing machine has been used to seal capsules filled with a variety of formulations. A new machine, the HICAPSEAL 40, has been designed and manufactured to improve the production flexibility of sealing.

HICAPSEAL 40



HICAPSEAL 100 DRYING UNIT



Legend

- | | | |
|-----------------------|-----------------------|---------------------------|
| ① Capsules Hopper | ② Rectifier Roller | ③ Control Panel |
| ④ Conveyor Belt Slats | ⑤ Double Sealing Unit | ⑥ Drying Unit |
| ⑦ Air Blower | ⑧ Air Filter | ⑨ Product Discharge Chute |

● Many Applications

The sealed hard capsule gives a tool to the industrial formulator to extend the types of product that can be made and filled.

● Hermetic Sealing

Capsules are automatically positioned to ensure perfect sealing with two bands of material. This ensures a leak proof hermetic seal of the cap to the body.

● High Output

The production capacity of HICAPSEAL 40 can be doubled by using a HICAPSEAL 100 drying unit, giving flexibility in production to meet demand.

● Stable Product Form

The sealed capsule reduces the transmission of gases, i.e. oxygen, into the shell thus reducing the potential for oxidation. The sealed capsule prevents the escape of odours from inside the capsule making it better for the patient to take.

● Product Identification

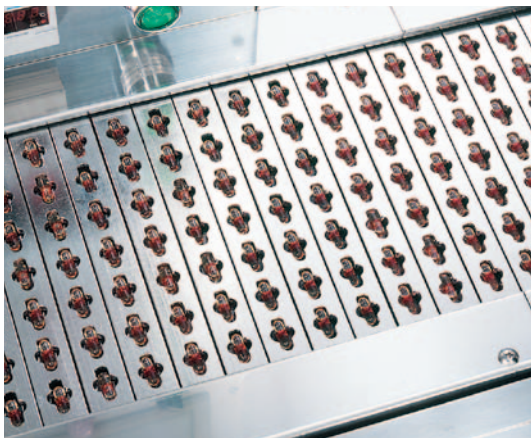
The seal can be coloured, producing a product with a distinctive get-up, which improves product recognition and customer appeal.

Features



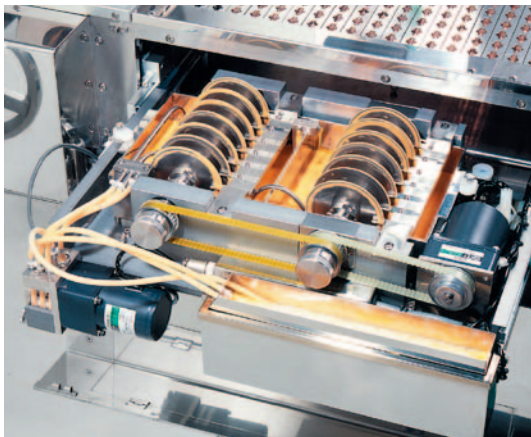
① Novel Capsule Rectification

The capsule rotary rectification system was developed by Qualicaps and has been patented in many countries. This system uses the minimum of mechanical force and capsules are not damaged during the process. Capsules are not dented and damage to the printing does not occur.



② Capsule Transport (Automatic capsule positioning)

The slats of the conveyor belt automatically position the capsules in the correct location for precise uniform sealing. Any variation in closed joined capsule length is overcome.



③ Sealing (Double band)

Two seals are applied to each capsule. This ensures that if there is an air bubble or unevenness in the first band it will be eliminated by the second application.

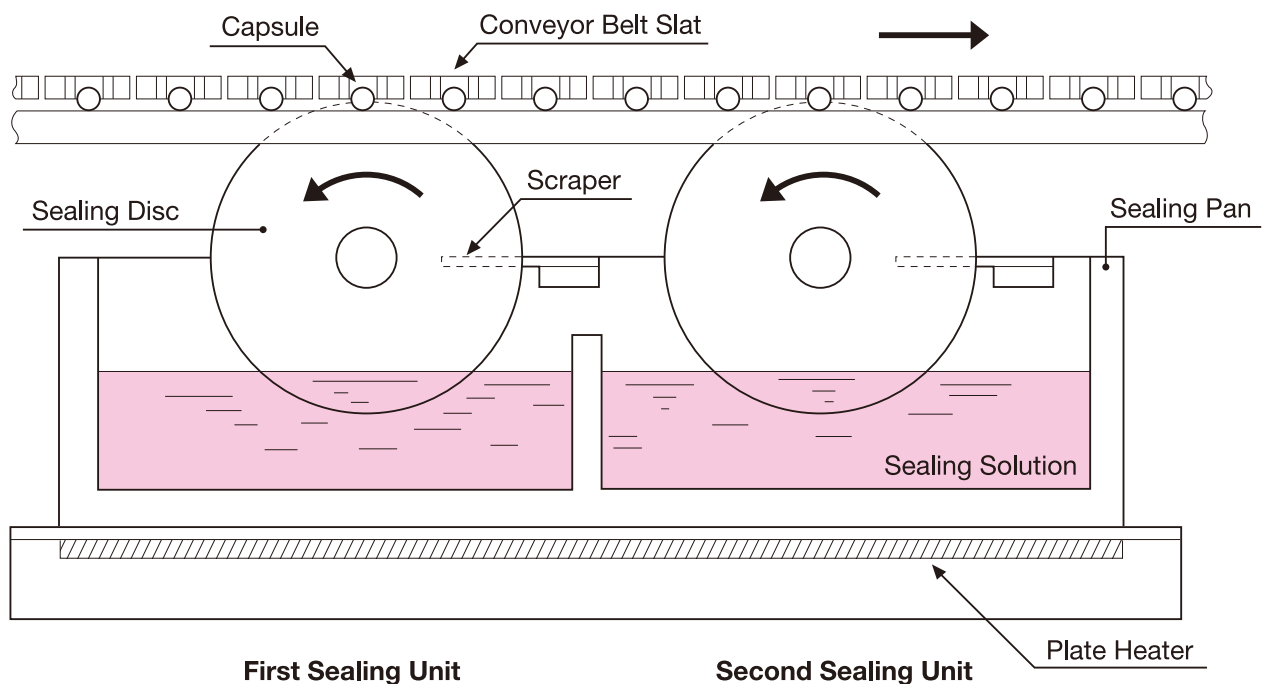


④ Drying (Room temperature air)

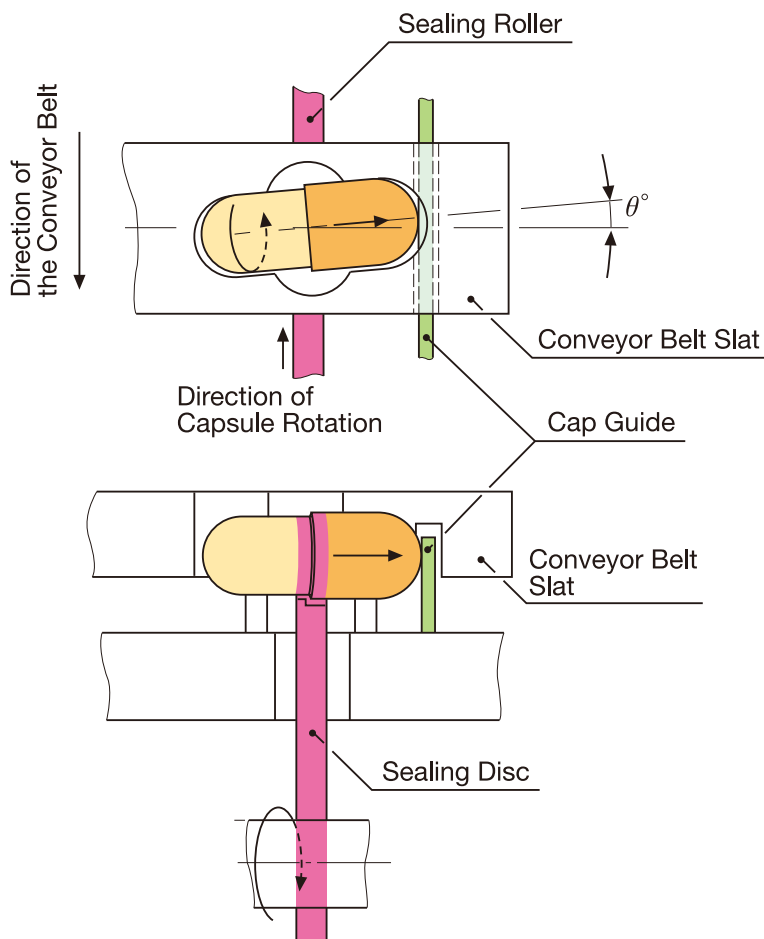
The wet bands of material are dried using filtered air at room temperature. The air is blown directly on to the bands and loss of moisture from the shell is reduced to a minimum.



Sealing Mechanism



Capsule Positioning



Capsules are transferred to the pockets in the conveyor belt slats, which are cut at θ° from the axis of the slat. The capsules rotate, in the direction as indicate by the arrow, as the belt moves. The capsules move up against the cap guide, which precisely locates them over the sealing discs. This position is controlled by the length of the cap. Thus any variation in the closed joined length of the capsules is overcome.



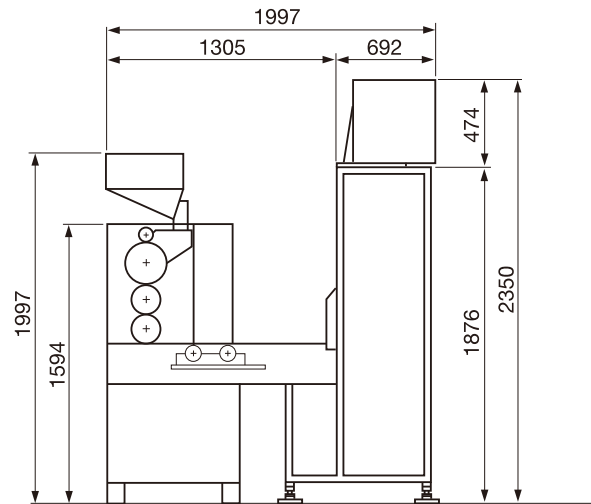
Mechanism

- ❶ Capsules pass from the hopper through the feed roller, the rectifier roller and the transfer roller. They are fed continuously into pockets in the conveyor belt slats.
- ❷ The slats in the conveyor accurately position the capsules over the sealing discs. The first sealing disc applies a band of sealing solution around the circumference of the capsule. The second sealing disc applies a second band to ensure a good seal.
- ❸ The sealing solution is maintained at a constant pre-set temperature. It is continuously circulated between the supply pan and the sealing pans to maintain uniformity of conditions.
- ❹ Sealed capsules are transferred from the conveyor belt slat to carriers in the drying unit. The drying unit uses filtered air at room conditions to dry the capsule seals.

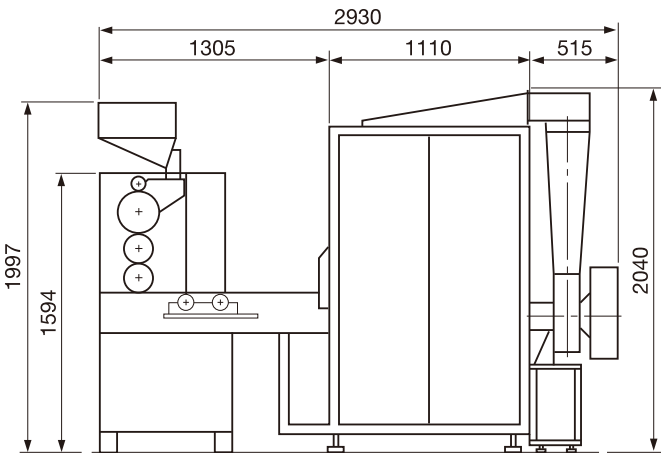


Specifications

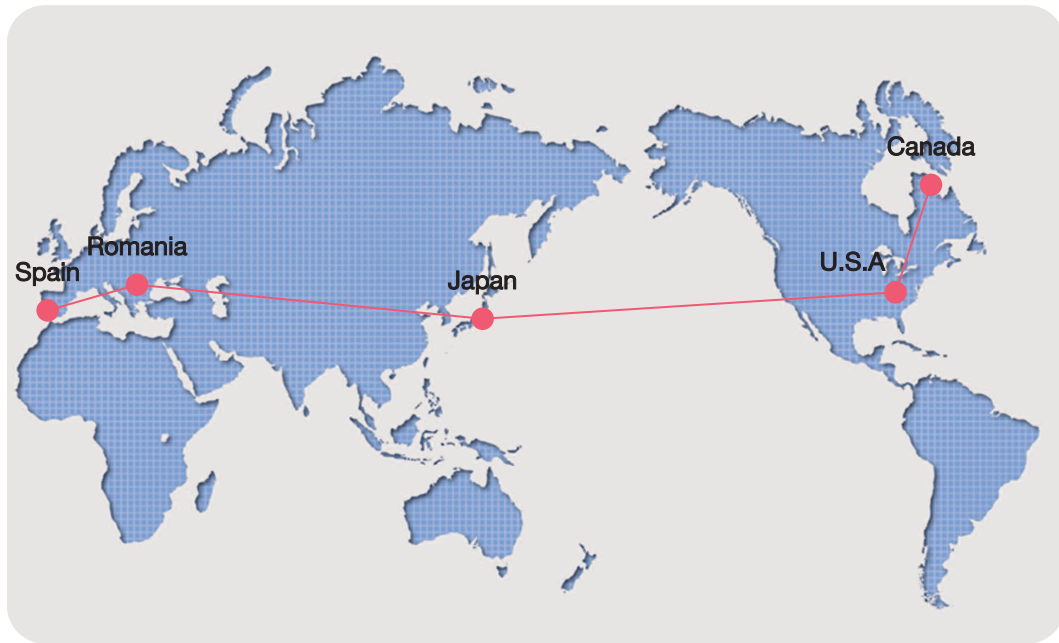
HICAPSEAL40



HICAPSEAL100



	HICAPSEAL40	HICAPSEAL100
Dimensions	1,997mm W × 650mm D × 2,350mm H	2,930mm W × 980mm D × 2,040mm H
Weight	870kg	1,240kg
Production Capacity For Gelatine	40,000 ~ 50,000 Capsules/hour	80,000 ~ 100,000 Capsules/hour
Sealing Conditions	Room temperature (25℃ 50%RH)	
Power Source	3phase 200 to 220Volts, 50/60Hz, 2.0kVA	
Compressed Air	0.5MPa (5.0kgf/cm²G), 1.0m³/min	
Vacuum	10kPa (1,000mmH₂O), 1.5m³/min	



GLOBAL NETWORK

Qualicaps Co., Ltd.

321-5 Ikezawacho, Yamatokoriyama
Nara, 639-1032
Japan
Phone: 81-743-57-8920
FAX : 81-743-56-5113
www.qualicaps.co.jp/en

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