

**DOTT. BONAPACE & C.**  
Pharmaceutical Machinery Division



## **BD-3000**

### **HARD GELATINE CAPSULE SEALING MACHINE**

US Patent No. US 7,000,368 B2



**Output 3.000 capsules per hour**

Automatic, bench top, capsules sealing machine (by banding the two capsule portions).  
Ideal to work with our automatic capsules filling machine **IN-CAP®** - version with liquid filling station

***Dott. Bonapace: over 50 Years' Experience in the Pharmaceutical World***

## IN-CAP®

Our automatic capsule filling machine **IN-CAP®** equipped with liquid filling station can handle a wide range of materials such as: oily-products, high viscosity paste and wax-type products which thanks to the jacketed hopper with stirrer, can handle melted products at temperature up to + 80°C which then solidify at ambient temperature.

**Capsules containing such products require to be sealed !**

**We are now proud to introduce on the world market our newly developed capsules sealing machine BD-3000**

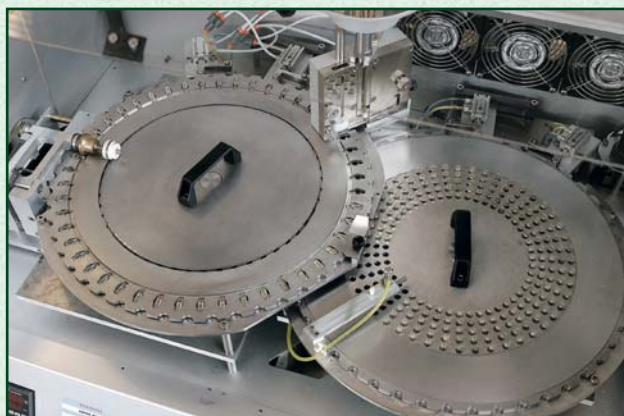
**The machine consists of 4 sections :**

1. capsule's orientation
2. capsule's sealing
3. capsule's drying
4. capsule's ejection

## WORKING PROCESS

- The filled capsules from the hopper, through a special rectifier, are positioned into the cavities of the rotating disc which takes them to the sealing station.
- The sealing operation is performed with the capsule perfectly centered thanks to the particular design of the cavity where it is positioned; the capsule is hold and rotated (3 complete revolutions) to assure the constant and uniform application of the sealing solution on all the circumference of the capsule.
- The sealing station consists of a heated tank where a rotating roller takes the sealing solution from the tank applying it to the capsule exactly on the capsule junction (body-cap).
- The sealing solution of our own development, while assures a perfect tight to the banding, also contributes to the sealing action of the capsule as it is also partially absorbed by capillarity by the hard gelatine capsule .
- The thickness of the banding strip is rather inconsistent.
- After sealing, the capsules are transferred in vertical position with the cap down, in a second disc; this operation is performed paying particular attention not to spoil the banding (in effect, the sealed part does not come in contact with any material).
- The sealed capsules remain in this disc for drying for over 4 minutes. The drying is facilitate by air fans which circulate air at ambient temperature.
- Finally, capsules are ejected through a chute.
- All operations are controlled by a PLC.

**All our machines are manufactured in accordance with GMP rules and following CE standards**



## Technical data

- Output: 3.000 capsules per hour
- Electrical absorption: 40 watt
- Electric voltage: 230 volts - 50 cycles - single phase
- Air consumption: 60 liters/minute
- Air pressure: 8 bars
- Sealing conditions: ambient temperature 20-25° C with 50% RU
- Machine dimensions: 850 x 610 x 510 mm
- Net weight: 70 kg



Data are not binding: we reserve the right to modify the contents for technical or commercial reasons at anytime.  
Please consult our Web Site [www.dottbonapace.com](http://www.dottbonapace.com) to get the complete sale program of our machines.



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