



**FRATELLI ZANASI**

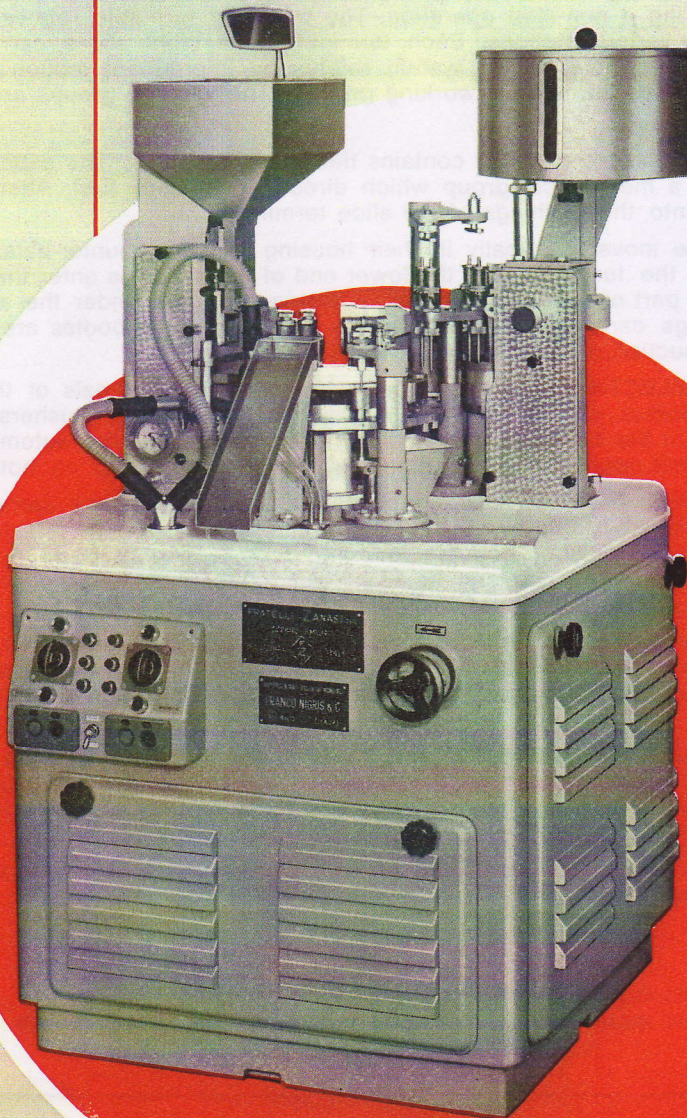
S.p.A.

**OZZANO EMILIA (Bologna)**

**AUTOMATIC  
CAPSULE FILLING  
MACHINE**

MODEL

**RM 63**



Automatic machine for  
filling and closing hard  
gelatine capsules  
in two-pieces

WORLD DISTRIBUTORS:

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# AUTOMATIC CAPSULE FILLING MACHINE

MODEL

# RM 63

Automatic machine for filling and closing hard gelatine capsules in two pieces. The cast iron base encloses all the movement and distribution organs. These are easily accessible from all sides through removable inspection doors. Noise and mechanical play are practically eliminated by the use of spiral gears, ball bearings and double cams. The working groups of the machine are placed all around the turntable which transport the capsules to the various stations. -The movement of the turntable is intermittent and all the working groups enter into function when the disc stops rotating. A conical pin blocks the turntable and ensures its exact position even after years of uninterrupted working. Safety controls have been incorporated to eliminate automatically defective capsules and thus securing a non-stop operation. The transport turntable rotates around its vertical axis to carry the capsules to the various stations. Each terminal of its eight slides carries two bushings for the loading of the capsules. The whole carrier system rotates by intermittent motion so that each group of two capsules successively reaches the various working groups. The working groups are arranged around the turntable in the following order:

- 1 CAPSULES FEEDING.** A hopper of considerable capacity contains the empty capsules. The capsules fall through two vertical channels down to a mechanical group which directs them body first. After having been directed the capsules are sunk into the bushings of the slide terminals.
- 2 OPENING.** The bushings, which can be moved vertically in their housing and are counter-balanced by loading springs, are lowered down to the turntable until the lower end of the capsules enter their seats in similar bushings situated in the lower part of the whole assembly. Going up again under the action of the loading springs, the upper bushings carry along with them the caps, while the bodies are held in the lower bushings of the turntable by suction.
- 3 PREPARATION FOR FILLING AND SELECTION.** The slides move back towards the axis of the turntable, clearing the space above the bodies of the capsules. A group of two fingers (pushers) levels off the bodies into the lower bushings of the turntable. A safety control provides for the automatic elimination of those capsules which were not opened because defective or carrying a cap on both ends.
- 4 FILLING.** Filling is carried out by two high precision volumetric dosing groups, each one carrying two dosators. The capacity of the dosators is adjustable by means of micrometric screws. The dosators pick up the correct quantity of powder from the powder hoppers and introduce a slug of powder into the capsules. The complete space of both body and cap can be filled with either powder or pellets. The adjustable compression of the powder allows the highest exploitation of the capsule space.
- 5 CLOSURE.** The slides move towards the edge of the turntable carrying a new the caps above their bodies. Two groups of pushers, working in opposite directions, join the two halves of the capsules. Breakages or telescoping by imperfect positioning of the two halves of the capsules are impossible because they are both guided by the same bushing.
- 6 EJECTION.** A group of two ejectors pushes the filled and closed capsules out from their bushing upward into the relevant ejection bushings. In the ejection bushings the capsules are held under the action of a very powerful vacuum pump: when the capsules are released from the machine they are clean and brilliant as before filling.
- 7 CLEANING.** The bushings of the turntable and of the slides, as well as the adjacent portions of the turntable are continuously cleaned by aspiration.

## OPTIONALS

Under request, a special unit for filling pellets can be supplied.

Under request, a special unit for filling one or more tablets or coated tablets on top of the power can be supplied.

## TECHNICAL DATA

Throughput (stepless speed adjustment)	. . . . .	.8000/12.000 pieces per hour
Absorbed power	. . . . .	.Kw 2,4
Net weight	. . . . .	.Kg. 740
Overall dimensions	. . . . .	.cm. 97 x 96 x 161 height
Gross weight	. . . . .	.Kg. 880
Export crate dimensions	. . . . .	.cm. 125 x 130 x 200 height

## SISTER COMPANIES:

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