GIMA, TOGETHER WITH OTHER SISTER COMPANIES PART OF THE IMA GROUP, CAN SUPPLY A COMPLETE TURN-KEY SYSTEM, STARTING FROM COFFEE CAPSULE FILLING AND SEALING, SECONDARY PACKAGING UP TO END OF LINE.
The Gima 590 capsule filling machine can handle both injected and thermoformed capsules of different dimensions. In case of self-protected capsules, the machine can also handle them in modified atmosphere (nitrogen). The Gima 590 is the reliable and cost effective option, designed for low/medium production volumes. It’s a rotary machine with a compact footprint, thus ensuring a remarkable space saving. The machine has the same technical solutions as of the well-known Gima 595. Easy cleaning operations are possible thanks to pull-out operating system. According to capsule configuration, tailor-made solutions are possible. Precise and accurate product dosing into the capsule is performed by a set of servo controlled augers combined with innovative gating systems. Extremely gentle product handling to suit a wide range of products to be filled (coffee with different densities, tea and soluble powders) as well as different types of material such as roll-stock and pre-cut lid. Sturdy construction ensures consistent, high dosing accuracy. Accurate weight is also assured by an on-line weighing system for each filled capsule with data feedback to automatically adjust the dosing unit or to reject the capsules outside the specified weight range. The GIMA 590 proves its flexibility being able to get upgraded in speed on the field, from 2 to 4 production lanes, and fitting different capsule styles on the same machine, with an easy size changeover between the different formats. The machine can be also equipped with an aroma doser which dispenses drops of liquid flavours on top of the coffee into the capsule, avoiding the risk of cross-contamination while producing flavoured coffee.

- EXTREMELY PRECISE DOSING UNIT TO ASSURE CORRECT PRODUCT WEIGHT
- EASY CLEANING AND PRODUCT CHANGE, EVEN BETWEEN COFFEE AND SOLUBLE POWDERS
- POSSIBILITY TO HANDLE DIFFERENT CAPSULE STYLES WITH EASY SIZE CHANGEOVER
- AROMA DOUSER TO DROP LIQUID FLAVORS INTO THE CAPSULE
- UPGRADABLE IN SPEED, EVEN ON FIELD
- POSSIBLE TAILOR-MADE SOLUTIONS ACCORDING TO CAPSULE CONFIGURATION
- MINIMAL MAINTENANCE REQUIREMENT
The GIMA 590 is able to produce a wide variety of espresso capsule with lid in modified atmosphere, handling both stackable and bulk capsules, inserting plastic or paper filters and sealing different materials as top lid.

1. Capsule vertical feeding system
2. Dosing system with nitrogen unit
3. Single capsule check weigher
4. Product compacting and capsule rim cleaning unit
5. Reel-holder with splicing system
6. Lid cutting/transfering and sealing unit
7. Exit side belts and transfer cleaning system
WORKING PROCESS FOR ESPRESSO CAPSULE CONFIGURATION
The GIMA 590 can pack drip coffee capsules placing into the capsule plastic inserts as well as a deep drawn pleated paper filter from roll-stock.

The machine is able to dose a wide range of products such as coffee, tea, soluble products and can be equipped with an aroma doser for liquid flavours.

**DRIP COFFEE CAPSULE CONFIGURATION**

1. **DEEP DRAWING PLEATED FILTER UNIT**
   - Filter thermo-sealing unit/Ultrasonic sealing unit
   - Filter forming and placing unit

2. **DEEP DRAWING PLEATED FILTER UNIT**
   - Filter thermo-sealing unit/Ultrasonic sealing unit
   - Filter forming and placing unit
WORKING PROCESS FOR DRIP COFFEE CAPSULE CONFIGURATION

1. Capsule vertical feeding system
2. Plate contrast and capsule holding
3. Filter cutting/transferring and sealing unit
4. Dosing system

5. Product compacting and capsule rim cleaning unit
6. Lid cutting/transferring and sealing unit
7. Exit side belts
GIMA S.p.A. reserves the right to make any changes to the described machine characteristics.

### 590 TECHNICAL DATA

#### 590 ESPRESSO CONFIGURATION

<table>
<thead>
<tr>
<th>Production speed 2 lanes</th>
<th>100 capsules/min.</th>
<th>200 capsules/min.</th>
<th>590 DRIP COFFEE CAPSULE CONFIGURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production speed 4 lanes</td>
<td>100 capsules/min.</td>
<td>200 capsules/min.</td>
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<tr>
<td>Installed power</td>
<td>14 kW</td>
<td>14 kW</td>
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<tr>
<td>Average power consumption</td>
<td>4 kW</td>
<td>4 kW</td>
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<tr>
<td>Machine weight</td>
<td>3000 kg</td>
<td>3500 kg</td>
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<tr>
<td>Nitrogen consumption</td>
<td>30 m³/h</td>
<td>30 m³/h</td>
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<tr>
<td>Expected compressed air consumption</td>
<td>1000 Nl/min.</td>
<td>1500 Nl/min.</td>
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<tr>
<td>Compressed air pressure</td>
<td>6 bar</td>
<td>6 bar</td>
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</tr>
<tr>
<td>Filter paper reel</td>
<td>Max outer diameter 500 mm</td>
<td>Max outer diameter 500 mm</td>
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<tr>
<td>Lid material reel</td>
<td>Inner diameter 76 mm</td>
<td>Inner diameter 76 mm</td>
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</tr>
</tbody>
</table>

Data subject to possible technical modifications and not necessarily definitive

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