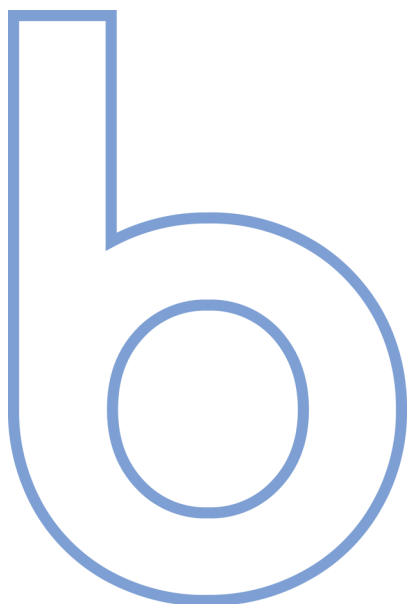




 **LEONARDO**
HD



- * Semi-automatic electronic machine with 3 axes.
- * Powerful 4-ton. mechanical press.
- * 2 axes with servo motors for feeding the materials (yarns).
- * Maximum length of the unfolded mop: 1200 mm
- * Production capacity: up to 1500 mops per hour
- * Longitudinal conveyor belt for unloading the finished mops.
- * Production of mops with plastic and metal connectors.
- * Mop length adjustment directly via the touchscreen panel.
- * LED lighting inside the machine.
- * 7-inch colour Siemens touchscreen.
- * Siemens control electronics.
- * Mixed-power electronics.
- * Photocell safety barriers for safety and automatic start-up of the work cycle when the operator's hands leave the loading area.
- * Remote technical support system via connection to the GIORI server.
- * The machine is available in the **Veloce** and **Matic** versions.
- * The Matic version is fitted with a special unit that straightens the metal wire directly from the roll, cuts and shapes the metal fork, and automatically feeds it into the press, including the insertion of the plastic cap. With this configuration, the Leonardo is fully automatic.



Semi-automatic mechanical-electronic machine – the new Leonardo HD model – for the assembly of all types of mops made from cotton, Spunlace, non-woven fabric and microfibre, with plastic or metal connectors and plastic or metal forks.



Operating cycle:

The operator inserts the plastic or metal holders (cappuccino and fork) into the press with a double mechanical movement in opposite directions.

A system of photoelectric safety barriers enables the operator to carry out all loading operations in complete safety, in accordance with EC regulations.

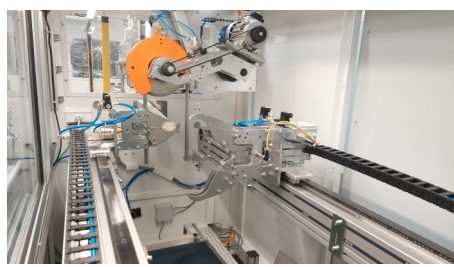
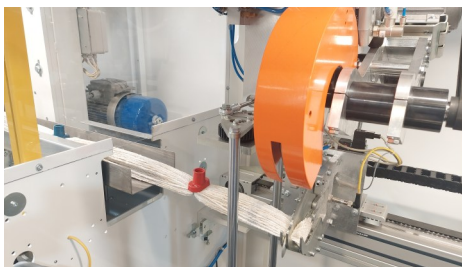
When the operator moves away from the area clear of the safety barriers, the work cycle is automatically activated.

The powerful press joins the cap and fork to the strand of material (cotton yarn).

Two traction units, driven by two independent brushless motors (servo motors) fitted with pneumatic grippers, pull the bundle of cotton yarn to the preset length.

A unit fitted with a Ø 250 mm circular blade cuts the bundle of yarn; the gripper drops the mop onto the longitudinal conveyor belt, which discharges it outside the machine.

The operations of folding, spreading and inserting the mop into the packaging machine (optional) are carried out manually.



Features of the Leonardo HD

The machine enables the production of mops with various types of holders, both plastic and metal, using cotton threads, microfibre, non-woven fabric strips and spunlace, with a long (extended) pile of up to 1,200 mm and a maximum width of 160 mm.

When metal forks are used, the ends can be curved using a special, optional accessory.

The plastic connectors (cap and fork) can have two, three or four pins.

The maximum production capacity in continuous cycle can reach up to 25 pieces per minute (approximately 1,500 mops per hour); this capacity is subject to possible variations depending on the materials, the types of holders (connectors) used, their shape and the operator's skill in inserting them into the press.

Programming – machine control, indication of major faults, and measurement of variations directly from the touch-screen panel.

Option to change the size of the caps and forks.

Control panel languages: Italian, English, Spanish.

Semi-automatic machine, protected in accordance with current EC regulations; staff must be present for its operation.

The finished product (mop) is automatically discharged onto a conveyor belt which carries it out of the machine; folding the mop and loading it into the packaging machine are carried out manually.