GAI has been designing and building automatic external bottle washer dryers machinery since 1990. The primary objective is to fully satisfy the needs and the expectations of the quality wine producers, who want an aesthetically perfect bottle, as well as the need to assist the labelling process. In this regard the Gai washer dryers, thanks to the patented system, assure a high quality of cleanness and dryness of the bottle.

The main characteristics of these machines are:
- Highly compact (easy to insert into existing bottling line and into little places).
- Complete washing of the bottles (removal of dirt and residues to glass manufacture from the complete bottle surface, including the (cork) closure area and the bottle bottom).
- Total drying of the bottles:
  - complete dying of the cork (closure) and bottle neck for a risk-free capsuling
  - drying of the bottle body to obtain a precise and enduring adhesion of the labels
  - total drying of the bottle bottom to avoid moisture within the packing carton and to allow for possible wrapping of bottles with protective paper wrapping without the risk of rips
- Simple and quick adjustment (height adjustment of all positions occurs simultaneously by means of a single operation. Drying heads fits all type of bottles)
- Possibility to by-pass the machine when not in use
- Anti-condensation device which allows for direct labeling onto bottles, even if bottles have condensation on the surface, without altering the wine temperature.
WASHING

The washing of the bottles is made with rotating brushes that have been wetted by a fine water spray (5). (Generally cold water is used, preferably with limited hardness). The bottles are rotated in the opposite direction of the brush (2) using the platforms (4). In this way the cleaning action of the brushes ensures even the perfect cleaning of extremely dirty bottles. The brush, by virtue of its rotating action, is self-cleaning and the wastewater leaves the machine through the discharge pipe. The brushes achieve the complete cleaning of the entire bottle surface:

- (1) body brush: cork area and bottle mouth
- (2) body brush: neck, shoulder and bottle body
- (3) bottom brush: bottle bottom

For sparkling wine corks fitted with wires, it is possible to clean the bottle neck with a special brush (optional).

DRYING

Bottle drying has two phases:

1) heads (1) dry the cork (closure), the neck and the shoulder of the bottles, to ensure perfect capsuling. The wipers (2) large portion of the water accumulates against the wipers and by gravity runs down to bottle, (they are self adjusting against the bottle body).

2) when drying is completed the head stops blowing and the wiper moves away from the bottle.

The side blowers (3) are simultaneously adjustable according to the bottle diameter. The airflow is very close to the bottle and thereby assures a perfect dryness of the bottles. The side blowers are 380 mm high and thereby accommodate most bottle types and sizes. The machine has an automatic system that adjusts the airflow based on the bottle size. The platform (4) is equipped with a central jet. Filtered compressed air is forced into the jet and in this manner the bottle bottom is dried.

ANTI-CONDENSATION DEVICE

This device (optional) temporarily removes condensation from the bottle surface in order to allow for direct labelling of bottles. This process occurs without altering the temperature of the contents of the bottle. The system improves the overall performance even when there is no condensation present.

The air blower is positioned very close to the bottle and its effect is of short duration. Heated air therefore only warms the exterior glass surface of the bottle. Wine temperature is not affected. If bottles are then packed into cartons, the sealed cartons insulate the bottles from surrounding conditions thereby preventing the reappearance of condensation. This system consists of heating elements (1) that heats the air. The temperature is adjusted by means of a timer located on the control panel. The cork (closure) is not exposed to the hot air.
520xP has the same features of 510xP but it has only the drying station.