

ZAMBELLI, FLEXIBILITY FOR THE FOOD AND BEVERAGE INDUSTRY

Zambelli Packaging Machinery was founded in 1969 as a company to manufacture packaging equipment. Based in the mechanical deep-rooted tradition of the city of Bologna in a few years the success of the technological solutions adopted has crossed the Italian borders and created a customer base of international renown. Zambelli today range of machines is composed by shrink-wrappers, tray-packers, cartoners, case packers also equipped with robotic pick & place. Suppliers are challenged by end-user for more flexible, efficient and less energy demanding equipment. Zambelli took up eagerly such challenge since its machine design was developed to measure up to such expectations.

The challenge has driven Zambelli to widen its portfolio of solutions by introducing on its well reputed range of shrink-wrapping and tray-packer machines robotic pick and place systems to handle unstable and/or irregular shaped containers, as well as to get a smooth operation for any products.

Some examples are the plastic cups for yogurt, jelly or desert, or even the cups for warm soup wrapped with insulating thermal cardboard sleeve or the glass bulb shaped jars for spices or candles or any other products. But not only containers for food or beverages also objects such as special caps with straw shaped as the cartoons characters to be inserted among the containers inside the packs as a gadget for kids. This actually is a project for which Zambelli has recently developed and supplied a machine for a US based customer who was looking for an automatic solution to handle the yogurt jars (standard container) and the caps (special objects, all different). Zambelli was able to equip one of its shrink-wrapping machine with a robot with a special picking tool that from a conveyor belt running parallel to the shrinkwrapper is capable of picking the caps and fit one cap in a bundle of 6 before the film wrapping, all oriented and at a speed of 500bpm.

Other cases of robotic pick and place are bulb shaped glass jars with spice product for which Zambelli has recently supplied the second line to a multinational company leader of the market. For handling these containers it must be avoided buffering and backpressure and it is necessary to adopt pick and place devices that based on picking directly the product are able to sort the container without the negative effect of the mass flow. With our robotic system the containers can be easily grouped in the pattern required and packed in plastic tray or tray



with film or wrap-around. Once the robotic system has completed the grouping cycles the pattern obtained can be then wrapped with heat-shrink film to protect it and ensure its integrity. The final bun-

dle will result in a robust and economic package as the Zambelli technology offered by its series of shrink wrapping machines allows to reduce the costs of the package using thinner film. The flexibility offered by the robotic pick and place is perfectly combined with the Zambelli well known efficiency-seeking approach with its LFT series of Tray-Packers/Shrink-wrappers and WR wraparound case-packers starting from the engineering of the frame, featuring a cantilever design that allows the operator total control of and accessibility to all areas of the machine. The frame is also designed so that all the parts that need lubrication are gathered in the back side. This hygienic design maintains separation between lubricated parts and parts in contact with the products.

Other benefits offered by the Zambelli approach and available on all range of equipment are the following: reduced change over time, "user friendly" operation, reduced footprint, reduced maintenance costs, higher production efficiency, better quality and attention to the aesthetic of the packs. These advantages have been obtained through up-to-date technological solutions to operate and control the machine and thanks to the Zambelli design with less moving parts hence less wear and adjustments, an extensive field testing and the standardization of functional groups on several machine models to extend to the all the equipment the benefits listed above. On the shrink-wrappers Zambelli's research has also tackled energy consumption for film shrinking and aesthetic improvement of the shrink pack. Zambelli unique energy saving heating tunnel design has obtained perfectly shaped packs without wrinkles by a tunnel of minimal length hence reducing thermal waste and machine footprint.

Zambelli "user friendly" technology with less moving parts in the machine has a dramatic impact on reducing time needed for installation and commissioning, training customer's personnel and carry out scheduled maintenance. All together these features reduce the machine's total cost of ownership that is the ultimate customer's goal. With thousands of machines installed Zambelli is active worldwide through its network of sale agents, presents in the USA with Zambelli USA LLC and in UK with Zambelli LTD. 🏠

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ZAMBELLI®

PASSION FOR EXCELLENCE

**From pick to place
there is more inside**

robot loaded



shrinkwrappers



case packers

