



Reliability & efficiency in packaging

Beverage industry has always been the primary market for Zambelli, a manufacturer of packaging machines in the mechanical deep-rooted tradition of Bologna, famous worldwide as Italian "Packaging Valley"

by Clara Biancardi

Zambelli was founded in 1969 as a company to manufacture packaging machines in the mechanical deep-rooted tradition of the city of Bologna, famous worldwide as "Packaging Valley". In a few years, the success of the technological solutions adopted has crossed the Italian borders and created a customer base of international renown. Today range of machines is composed by: shrink-wrapping machines, tray-packers, cartoners, case packers, pick & place and robotized palletizer.

Beverage, the primary market

The beverage industry has always been the primary market for Zambelli. Since the introduction of the PET bottles, beverage volumes have dramatically increased along with new designs of light weight bottles, with reliability and efficiency of

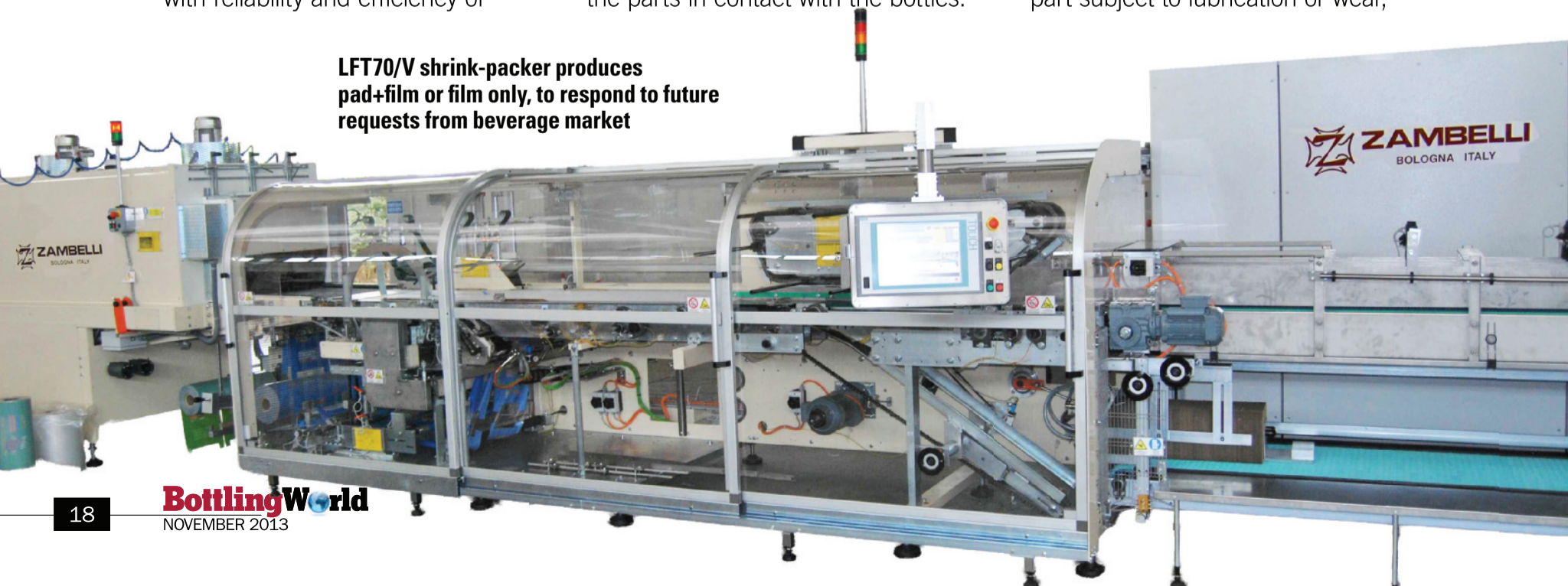
the machines becoming a must for every successful bottler. Zambelli took up eagerly this challenge since its machine design was developed to measure up to the expectations of operators and maintenance personnel who test reliability and efficiency every day and ultimately make the success of a piece of machinery and a manufacturer. Zambelli have followed this efficiency-seeking approach with its LFT series of tray-packers/shrink-wrappers 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 of the machine. This hygienic design maintains separation between the lubricated parts and the parts in contact with the bottles.

Shrink-wrapping advantages

In addition to these benefits, Zambelli has also given its LFT series of tray-packers shrink-wrappers features that allow the following advantages: reduced change over time, user friendly operation, reduced machine footprint and maintenance costs, higher production efficiency, better quality of the shrink packs. All these advantages have been obtained through up-to-date technological solutions to operate and control the machine and thanks to 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 a wide range of machines the benefits in terms of reliability and efficiency brought by every innovation. Examples of this development are very important.

- Bottle separation system which allows to pack bottles of any format and diameter on the same machine while maintaining optimal performance conditions.
- Wrapping bar assembly without drive chains. This group has no part subject to lubrication or wear,

LFT70/V shrink-packer produces pad+film or film only, to respond to future requests from beverage market





LFT series

Machine for packaging in heat retractable material, continuous movement, LFT are the latest generation for medium and high production levels. Unique design features are:

- no mechanical parts on operator side thus giving great accessibility;
- maintenance jobs simpler and faster;
- great range of choice for formats and versions;
- modular structure.

Zambelli LTF20 with robotic pick&place

total accessibility, operation with no resistance and can be immediately reset in case of an E-stop.

- Tunnel metal mesh belt without side drive chains. The removal of these chains that are highly sensible to the cyclic heating and cooling through the tunnel has reduced to zero the maintenance of the whole tunnel. The stretching of the mesh belt is in fact automatically compensated for by a counter weight assembly.
- Powered servo driven film unwinding system preventing any film stretching when pulled from the roll - allows a dramatic reduction of the film thickness with significant material savings for the end user. Furthermore, the absence of stretching of the film increases the accuracy of the centering of the printed film on the bundle.

User friendly technology

Zambelli's research has also tackled energy consumption for film shrinking and aesthetic improvement of the shrink pack. Unique energy saving heating tunnel design has obtained perfectly shaped packs without wrinkles by a tunnel of reduced length hence reducing thermal waste and machine footprint. The user friendly technology with

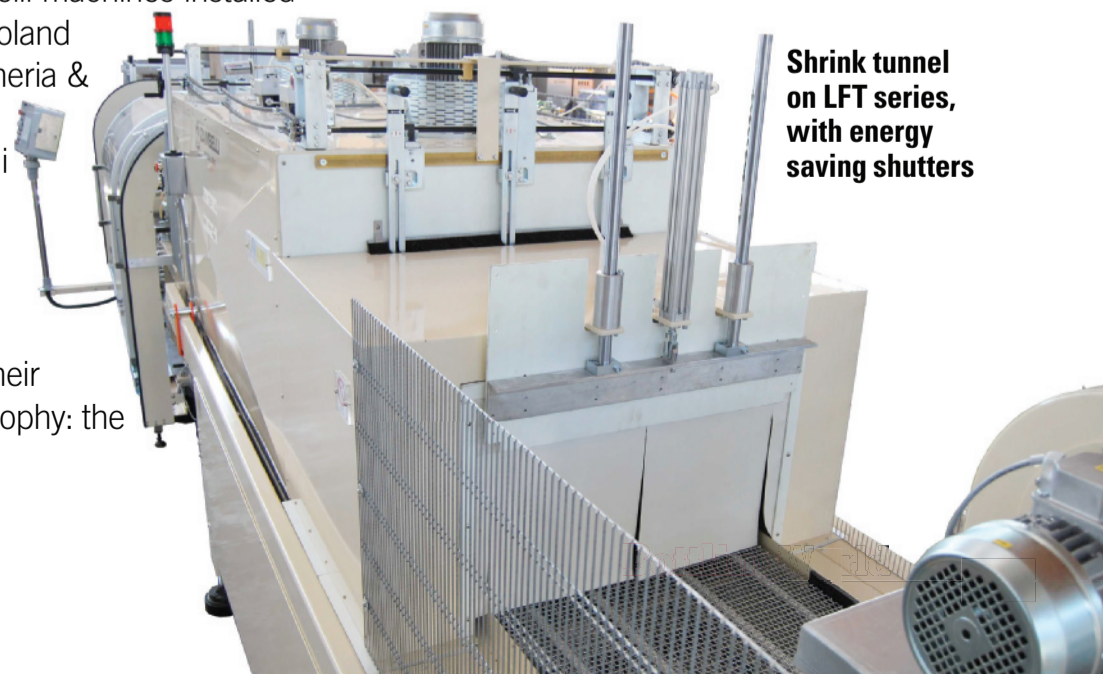
less moving parts in the machine has a dramatic impact on reducing time needed for installation and commissioning, training customer's personnel and carry out scheduled maintenance. All together these features reduce the machine's total cost of ownership (TCO) that is the ultimate customer's goal. These are only some of the innovative features shared by all the LFT series tray-packers and shrink-wrapping machines, throughout the widest range of capacity available from 15 up to 150 cycles per minute and capable of running product in film only, pad+film or tray+film style. Zambelli certainly have the right machine to help you driving down your production costs.

Flexibility with different formats

An example of performance and good results of the LFT series is the recent Zambelli machines installed by Eko-Vit, Poland and by Drogheria & Alimentari, Italy. Zambelli has installed at Eko-Vit Poland a perfect example of their design philosophy: the

LFT70/V tray-packer/shrink-wrapper running at 70 cycles per minute fed with cans - 150, 250, 296, 330, 355 and 500 ml, and glass bottles 275 and 300 ml. Great flexibility with so different product formats handled on the same machine. In-feed conveyor is purposely designed to allow quick change over just by sliding side guides with preset positions for the three different formats that can be fed to the machine (hi-cones, multipacks and loose cans). LFT70/V tray-packer/shrink-wrapper is pre-arranged to produce also pad+film or film only, a great feature to respond to future requests from the market. The machine cycle is controlled by Siemens PLC and a 15" touch-screen pc allows the operator to easily monitor all the phases of the machine working cycle thanks to a graphic diagnostic system. ♦

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Shrink tunnel on LFT series, with energy saving shutters