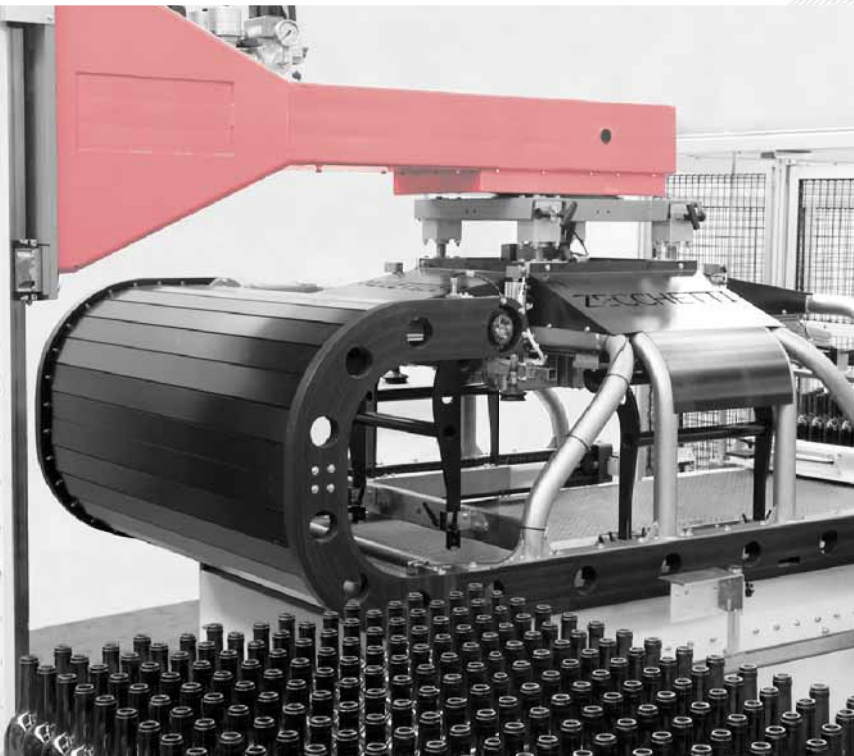


ZECCHETTI, RESEARCH, DEVELOPMENT AND BUSINESS ETHICS MADE IN ITALY

Zecchetti is a proud-to-be Italian company operating for more than 50 years in the industrial automation sector in an area famous all over the world for its excellent mechanical industries. Ferrari, Maserati, Ducati are just a few of the most well known companies headquartered in the Emilia Romagna area.



Years of tradition, experience and research are an essential part of the training of people operating in this area, hence the critical importance of the contribution of each and every single person of

the company, employees, workers and managers alike.

People working in Zecchetti are striving to improve their products constantly, making them more efficient and easier to use but also with better safety conditions.

This spirit permeates all company activities; design development, production, sales, and is accompanied by a corporate ethic that goes beyond mere compliance with the procedures (not always sufficient) but includes a personal

HANDLING

attitude that leads to always do something more, creating in this way better value for their clients.

An example of the advanced level of research aimed at improving efficiency is shown in the system described below.

WORK IS ALWAYS IN PROGRESS

In fact, Zecchetti has set up a couple of areas in its facilities where new machines and new groups are installed and duly tested non-stop.

This also gives Zecchetti customers the opportunity to test any new or difficult equipment before buying it. Another application continuously evolving is the ZSA (Zecchetti Supervision Application), developed by Zecchetti software engineers that allows for the management and supervision, even remotely, of the installations, through a user-friendly touch screen. The functions of this application are many and in constant development.

The most recently implemented task is an important function that helps the operator in ensuring good

BOTTLE SMART ORIENTATION

The principles of the Zecchetti ORIENTATOR can be summarized by the following stages:

- 1. Bottle spacing:** operation performed by an inverter controlled belt spacer mounted upstream.
- 2. Bottle position recognition:** operation performed by one or more video cameras. The image, or images, are processed by a dedicated controller that compares the shot of the bottle in transit to a previously set model (representing the correct position the bottle must have after orientation).
- 3. Bottle orientation:** operation performed by two timing belts acting on the bottle neck; these belts correctly orientate the bottles thanks to an "acceleration/deceleration" mixed movement based on mathematical calculation and on the information received from the vision system.

Hardware

- High performance vision system. In the case of very simple bottles, this system can be replaced by a smart camera.
- The timing belts, physically orientating the bottles, are moved by two brushless motors controlled by a dedicated servo drive system with Encoder feedback.

Benefits

- Thanks to the new vision system it is possible to have a single HMI allowing both to manage the algorithm dedicated to the vision and to set the parameters (bottle diameters, distances, time) to be transmitted to the motion controller.
- This special lens allows to laterally visualize the bottle neck in a single framing, from above. It is therefore possible to see logos, brands, distinctive features, position of the welding, position of the thread, with a single video camera positioned over the bottle. The CPU develops the image "horizontally", the image is compared to the set model thus informing the motion controller about the necessary bottle orientation.

No more need then of installing the three lateral cameras otherwise required to recognize the bottle.



ZSA "ZECCHETTI SUPERVISION APPLICATION"

MAIN FUNCTIONS



Synoptic of the whole line, possibly even on a remote supervision PC.

Simple and immediate access to any part of the line by selecting it. Possibility of modifying the line parameters.

Display of each and every single motor speed.
Display of each and every single motor absorption.
Adjustment of each and every single motor speed

DATA PROTECTION

Six safety and configurable levels accessible by means of a password.

RECIPE SETTING

Possible to create a new recipe by simply typing the new bottle diameter.
Possibility of saving/loading/deleting the recipes.
Possibility of offline setup for any recipe while machine is running.

PRODUCTION COUNTINGS

Set-up of four work shifts.
View of production history regarding any period.

ALARM MANAGEMENT

View of active alarms with assistance.
View of alarm history regarding any period.
View of statistics regarding any alarm for any period.

maintenance of equipment. The system warns in advance of the need to do maintenance on various parts of the machinery, continuing with a countdown to sensitize the operator and act as a reminder until the moment when it is reset. As proof of the innovation and usefulness of Zecchetti's new products, a competitor copied the design of the MPH – Multi Purpose Head

even though it was patented.

The section of the court of Bologna specialized in business matters recognized this behaviour as unfair competition and ordered the infringing company to immediately withdraw from the market the copied palletizing head.

The MPH, presented at glasstec in 2010, is a universal palletizing head that has proven to be very

important when having to change format quite often because it does not need any adjustment, as it allows for immediate and automatic changeover. Zecchetti will be present at glasstec 2014 and will, once again, present a new and innovative palletizer moving ever more towards the automation of format changeover. ■

The peculiarities of the **PATENTED Multi-Purpose Head MPH** enable the safe transfer of the layer for **almost all types of containers**, even in the absence of space among the container necks, with no need of format changeover.

Possibility of also **transferring strapped layers, layers of cartons or packs**.



- Head guides and other components are **auto-adjustable**.
- ZERO article jump between table and plane during layer **loading phase**.
- Pursuit between table and plane thanks to **brushless motors**.
- Loading either with stationary or stopped table in order to give **priority to the stacker**.

 **Zecchetti**
HANDLING TECHNOLOGIES

ZECCHETTI S.R.L.

Via Galileo Galilei 1/1A - 42027
Montecchio Emilia (RE) - Italy
Tel: +39 - 0522 - 867411 - Fax: +39 -
0522 - 866034
E-mail: info@zecchetti.it

