# YOUR NEW FOOD AUTOMATED MACHINE: FASTER TO DEVELOP, TURN-KEY IN MOTION CONTROL

MZ solutions for motion control can strongly reduce the time to market of your new packaging & beverage machine. We develop and realize Hardware & Software systems fully in accordance with your project, to integrate tailor made configurations. Made in Italy since 1976.

CMZ Sistemi Elettronici Srl is a leading Italian producer of solutions for industrial motion control since 1976.

The focus of the company is to serve the market with hardware and software components (Controllers, brushless and stepless servo Drives and Motors, Libraries, Apps, up to Hmi operator panels) to build up a whole tailor made electronic system for the motion of vertical and horizontal flowpacks, multihead and linear weighers, filling and bottling machines, capping and labelling machines, loading systems, end line.

Beverage & packaging industry represents an excellence in terms of CMZ know-how from over 30 years, outstanding all our deep experience and technologies fully in accordance with the technical projects of OEMs and system integrators to satisfy both the dynamics of the machine and the need of costs reduction.

# Software & Hardware, complete combination

CMZ solutions include **the SOFT-WARE** such as:

 LIBRARIES granting a pre-settled machine configuration while minimizing the commissioning set up, or developed by using fully customized functions for axis control.

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- APPLICATION APPs in a wide range of available ready-to-use functions, all easily configurable on a new food automated machine (they can also be integrated with other applications already in use by the manufacturer).
- The newest COGNITIVE V software using machine learning algorithms for integrating hi-tech vision and illumination systems both with CMZ controllers and with others available on the market: the perfect combination for OEMs manufacturers of automated machines pursuing Industry 4.0.

CMZ also provides **the HARDWARE** components, the cutting-edge ones:

- FCT640 new-generation modular master controller Codesys v3.5 with PLC + soft motion, whose technological soul is engineered by CMZ managing up to 99 axis thanks to dual core 64 bit 1.0 GHz CPU, it is compact and light (only 300 grams for basic version "basic"), providing connectivity and complete range of I/O modules. Settled up with CMZ motion libraries, every flowpack can be ready to pack any format.
- IBD & ISD servodrives and motors with integrated electron-















ics completely developed and made in Italy by CMZ always on tailor made logics for the most innovative and demanding manufacturers in multiaxis control. IBD & ISD provide high performance at high and low speed, maximum control, connectivity, internal programmability IEC61131-3 compliant, EtherCAT and CANopen field bus.

Daisy chain connection is as an attractive solution for on field axis running, enabling to join more devices together in the same DC bus. The IBD family is ranging from 1,22 Nm on flange 60 up to 30 Nm on flange 190. Power supply from 270 to 740 Vdc (560 Vdc Nominal).

• PT2 HMI operator panels, these are not directly produced by CMZ but traded in aim to give OEMs a full turnkey solution from the controller to the final user's side. PT2 panels are a new series we've released in 2020 enhancing CMZ range, it is made up of 7 touch screen terminals models with simple window and top performances fitting Industry 4.0 and IoT. Dimensions from 4.3" up to 15".



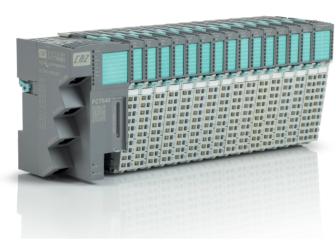
- PROFINET field bus to enlarge CMZ open frame communication.
- Wireless Bluetooth 4.2 connection to debug and diagnostic the devices without wiring any system.
- OPC-UA protocol to upper level systems currently becoming a widespread opportunity for interoperable communications between PLCs and SCADA systems, ensuring effective monitoring and control of the plant with a high level of data protection against attacks and threats.

# The master way to motion control 4.0

Connectivity, user friendly, pre-configurability, easy to use, open network are common words we are using for our solutions. As the next industrial automation generation is setting up on a wider connection, CMZ welcomes those worldwide who would like to join us on this challenge. We strongly believe in creating partnerships with our customer as the master way to find solutions rather than only supply devices.

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FCT640 modular master controller PLC + motion control



IBD integrated brushless drive; electronics developed by CMZ











PT2 HMI here with one of available CMZ libraries configured for a flowpack



