

CMZ

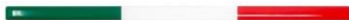
Company profile

SYSTEMS & SOLUTIONS FOR MOTION CONTROL

2023



soga  energyteam



COMPANY

APPLICATIONS

PRODUCTS

WHERE WE ARE

CMZ engineers and produces in Italy electronic systems for industrial automation.



HARDWARE

- IEC61131 controllers
- Drives and Motors
- Planetary gearboxes
- Peripherals & I/OS
- HMIs

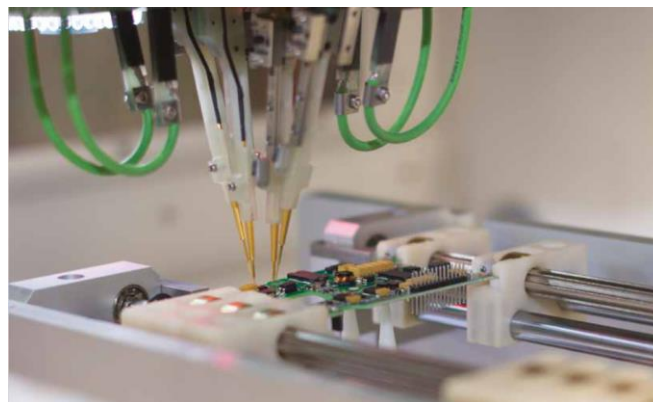
SOFTWARE

- Communication, motion and utility libraries
- Configurable dedicated Applications

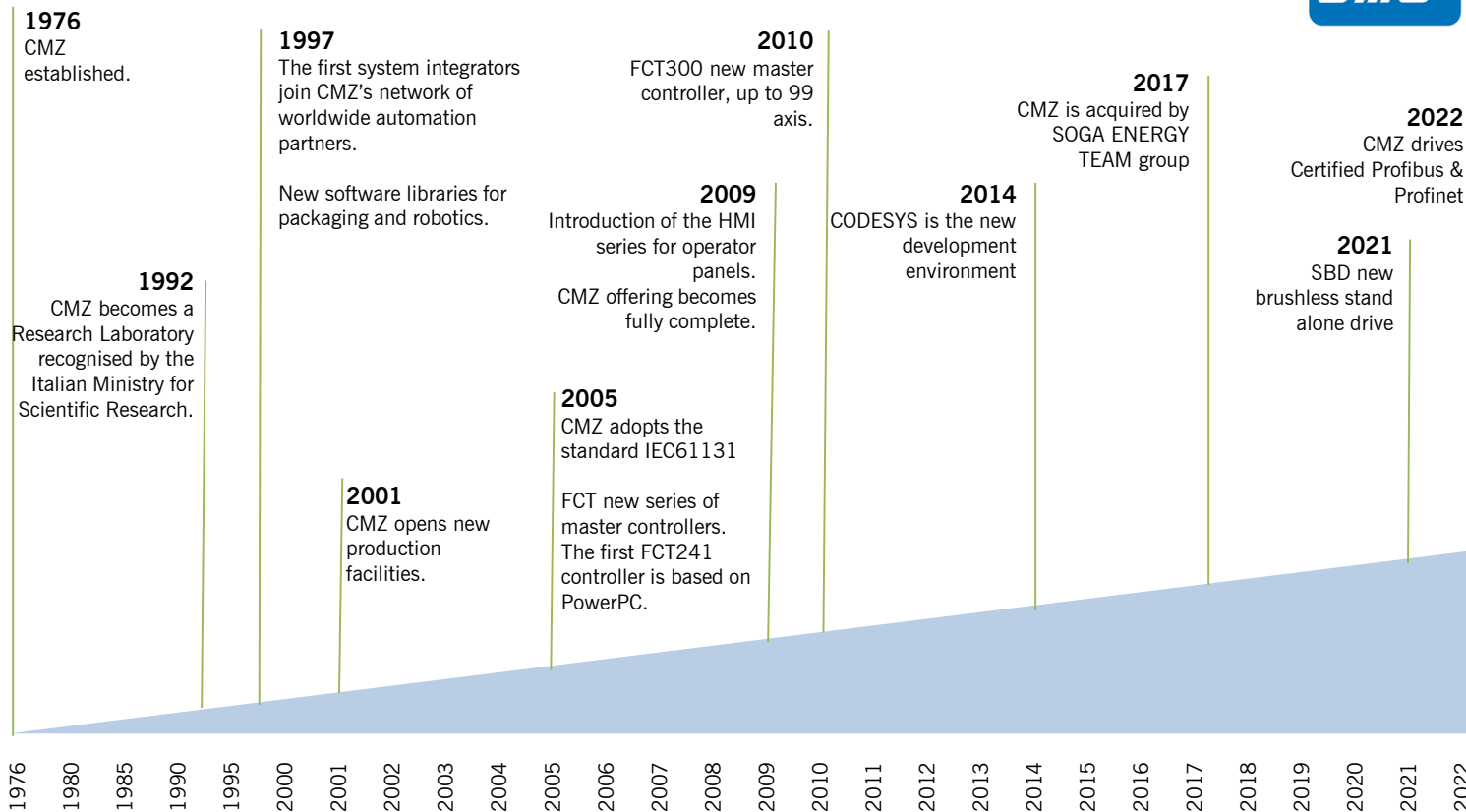
SERVICE

- Engineering & Co-Design
- Remote technical assistance
- Maintenance programs
- Revamping

CMZ MISSION is to be a recognized reliable Partner for **Original Equipment Manufacturers** and **system integrators** for the co-development of automatic machines and equipment with **customized** and specific configuration in **multi-axis motion**



CMZ is a **Research Laboratory** recognized by the Italian Ministry for Scientific Research



Volume of Business 2022
(Order Intake, mln €)

10,9



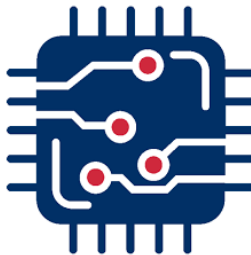
Headcount



73

Investment in R&D
(OpEx & CAPEX; % of
Revenue)

18,3%



of R&D SW and HW
engineers

28





- 3 companies : SOGA SpA, CMZ Sistemi Elettronici Srl, Sincro doo
- 5 commercial brands, international presence in 85 countries
- Turnover yearly~ 55.000.000,00 € and ~ 350 employees
- Plants and offices for over 76.000 sq.m.



POWER GENERATION, MOTION & CONTROL

AGRICULTURE AUTOMOTIVE BEVERAGE
 COGENERATION CONSTRUCTION INDUSTRIAL
 LIGHTING MARINE OIL&GAS PACKAGING
 RAILWAY RENEWABLES RESCUE RESIDENTIAL
 TELECOM WELDING



OMRON

Technipes

Холдинг
РУССКАЯ ТРАПЕЗА

LAURAS-FENIX

MACHINERY WORKS

Tecno Pack
PACKAGING MACHINESP.E.
LABELLERSISO 9001
ocme
MOVING IDEASOPTRON
TEXTILE MACHINERYimanpack
PACKAGING & ECO SOLUTIONSIMA
INDUSTRIA
MACCHINE
AUTOMATICHESERKON
makinaWPR TAKA
PARTNERSWeighers Bag Makers
Gmbp
PFM GroupBW Flexible Systems
A Barry-Wehmiller Packaging CompanyLab i-DOSITECNO
Pharma Technologies

SIPA

AETNAGROUP

GEA
engineering for
a better worldWEIGHTPACK
packaging machinery

SILCA

camag
GROUP
your perfect packaging system partnercoesia
GROUPBL
Bag LineSP
general
system
pack

KÖRBER

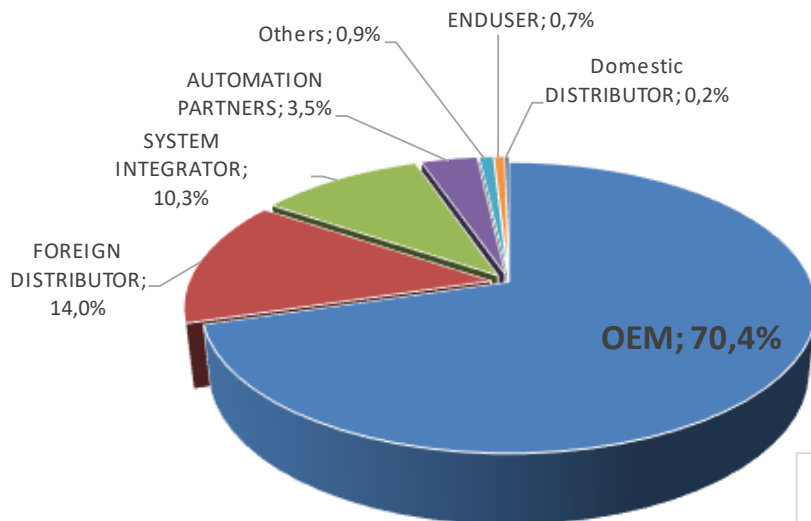
COMEK
AUTOMATIC PACKAGING SOLUTIONSREEPACK 20
YEARS
COMMITTED TO PACKptm
Packaging MachineryMbonardi
flexo & converting technologyPC
Paper Converting
Machine CompanySimionato
packaging
systems

bertolaso

GROUPPACK

DALLAN

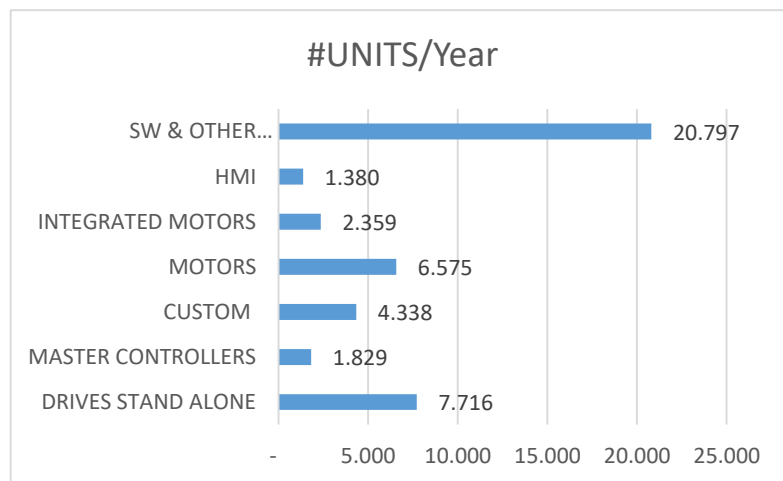
ILTI
ITALIAN LABELLING TECHNOLOGY INDUSTRYMAICA
automated machines for shirts



With a team of 35 sw and hw engineers CMZ is the ideal partner to support the OEM's

CMZ provides a **full service** platform to a wide installed base:

- 510 Active Clients
- 250.000 Units

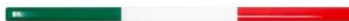


COMPANY

APPLICATIONS

PRODUCTS

WHERE WE ARE



KEY APPLICATION MARKETS



Packaging

24,3%

Dosing &
Weighing9,0
%20,2
%

Beverage



Converting

7,2
%Special
Machines

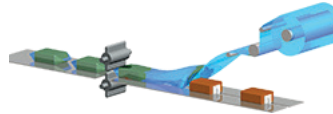
24,9%



14,4%

Textile

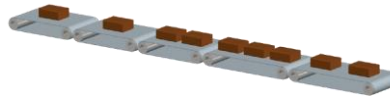
Packaging



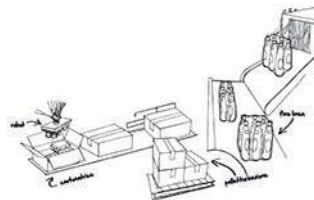
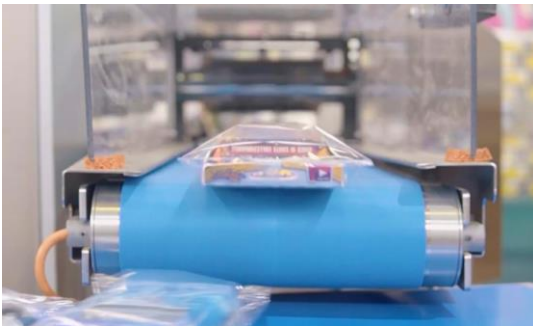
HORIZONTAL PACKAGING MACHINE



VERTICAL PACKAGING MACHINE



LOADING SYSTEMS
SMART BELTS

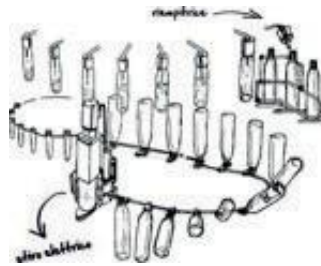


END LINE

Food & Beverage

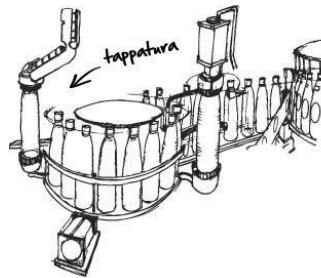


LABELLING MACHINES



FILLING MACHINES

BLOWING MACHINES



CAPPING MACHINES

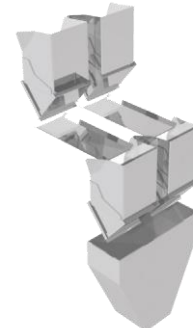
Dosing & Weighing



MULTIHEAD WEIGHERS



LINEAR WEIGHERS



VIBRATING FEEDERS



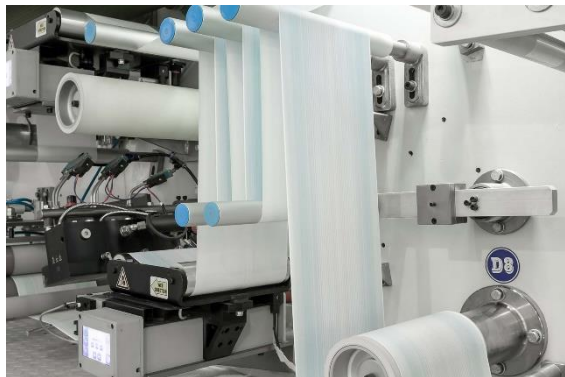
Printing



SYNCHRONIZATION OF PRINTING CYLINDERS

REGISTRATION CONTROL OF PRINTING CYLINDERS

Paper converting



INTERFOLDERS

REWINDERS CUTTING LINE

FLEXO MACHINES

Textile



MACHINES FOR FIBERS TREATMENT
(SYNTHETIC AND NATURAL) SUCH AS:
COMBING MACHINES, DRAW FRAME MACHINES

CROCHET AND JACQUARD MACHINES

SEWING/EMBROIDERY MACHINES

SINGLE AND MULTI NEEDLE QUILTING MACHINES

ISO interpreter (G-code)



CNC MACHINES

Glass



THREADING MACHINES

SEALING MACHINES EDGERS

MACHINES COATING

REMOVERS

GLASS CUTTING

Metal sheet



FLYING SHEAR

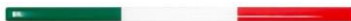
DEFORMATION

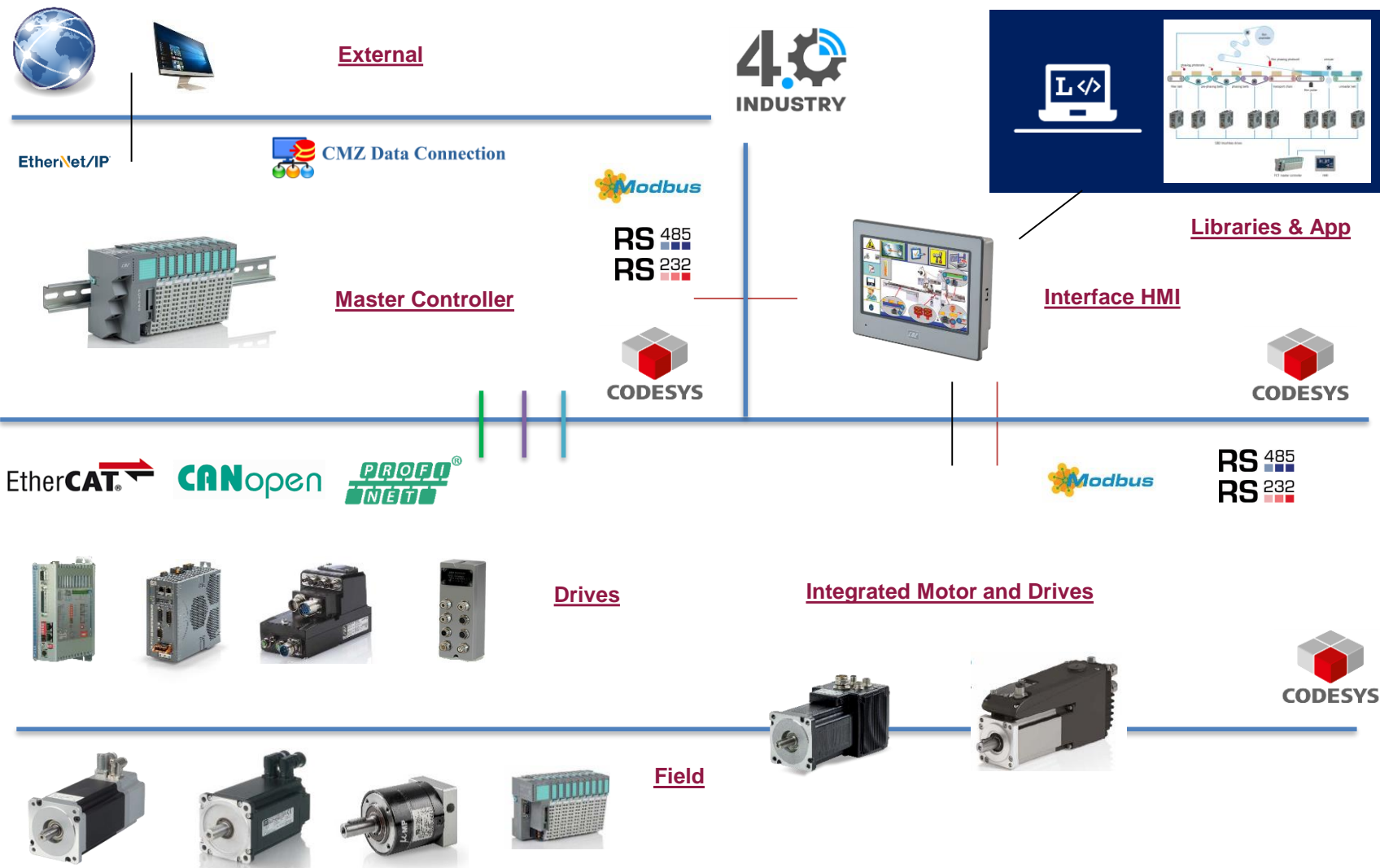
COMPANY

APPLICATIONS

PRODUCTS

WHERE WE ARE





FCT640: Master Controllers

Up to 99 axes

Processor:

CPU: RISC dual core 64bit, 1.0 GHz three level cache

Memory capability:

1 GB Nand Flash for storage

512 MB DRAM high bandwidth 64 bit 1666 MT/s

32 KB Ferromagnetic RAM (non-volatile PLC data)

SD-Card

Communication ports:

1xRJ45 Ethernet 10/100 MBit TCP/IP (Debug)

2xRJ45 Ethernet 10/100 MBit (Fieldbus)

1xRJ45 CAN-Bus (CANopen Master)

Local I/O modules:

64 modules, each with a maximum of 16-bit IO (1024 digital) or 8 channels analog (512 analog) - Big variety of modules available.

Wide variety of modules available

Fieldbus:

EtherCAT Master, CANopen Master

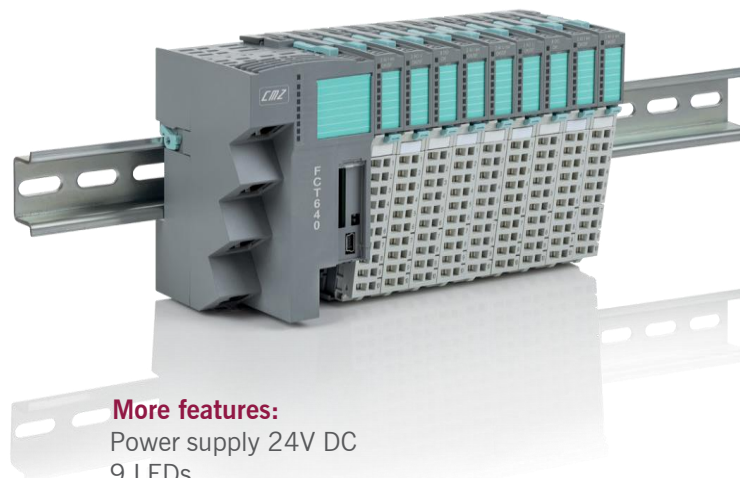
Connectivity:

OPC-UA

Modbus TCP Master/Slave

Communications based on UDP-TCP

WEB server, PLCHandler



More features:

Power supply 24V DC

9 LEDs

RTC with CR2032 Battery

Reset-Button – Restore-Button

0° - 50°C ambient temp

Fanless



PRODUCTS – SERVO DRIVES

SBD: Servo Drives

Brushless drives with CANOpen, EtherCAT and Profinet interface

- From 5 to 20 A nominal
- 230 Vac and 400 Vac
- Bluetooth control*
- Feedback: Resolver or absolute/incremental encoder
- Encoder OUTPUT or second encoder INPUT
- STO



coming soon



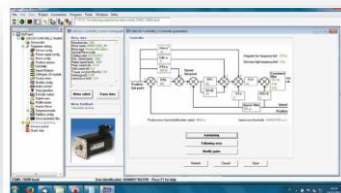
RP64: I/O module

Can Open Coupler
32 Di + 32 Do + 2 Ai + 2 Ao



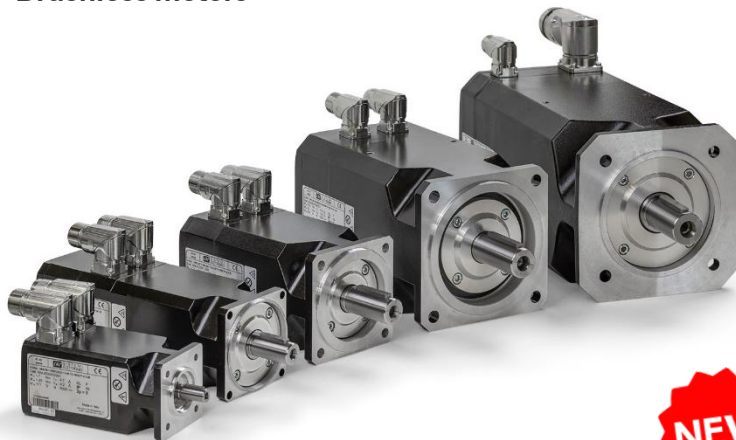
CMZ PROPRIETARY
SOFTWARE ENVIRONMENT

CANopen



MMD/B/S: Servo Motors

Brushless motors



WEB CONFIGURATOR

TRY IT ON OUR WEBSITE!

www.cmz.it/en/brushless-motors-product-finder/



TORQUE RANGE

- From 0,5 to 120 Nm stall torque

POWER SUPPLY

- 230 Vac and 400 Vac

SPEED

- From 1500 to 6000 rpm

FLANGE

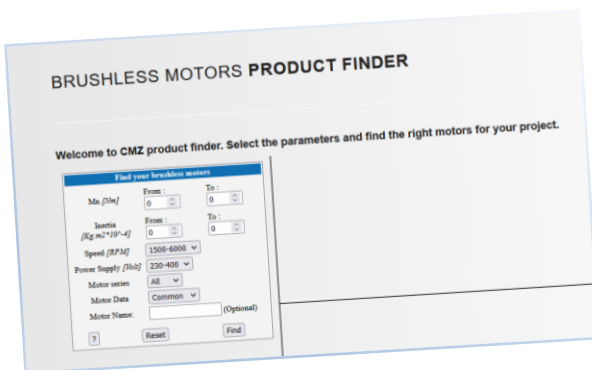
- From 70 to 240 mm

FEEDBACK

- Resolver / Incremental / Absolute – Hyperface / DSL

OPTIONS

- Brake / Flywheel / IP67



PPG: Precision Planetary Gearboxes

NEW



TR series



MP series



TR/MP_G series



TR/MP_IS series



TR/MP_MB series



LC series



LCK series



SL series



KR series



TQ series



TQFEK series



TQK series



TQF series



IBD: Integrated Brushless Drives

Power supply: 275 ÷ 730 Vdc (560 Vdc Nominal)

Logic supply: 24 Vdc

Torque range

Stall torque 1,3 - 2,8 – 4 - 5,6 – 6 - 15,4 - 30 Nm

Rated speed:

Vn=5000 rpm (for 1,3 Nm)

Vn=3000 rpm (for 2,8 – 4 - 5,6 – 6 - 15,4 - 30 Nm)

Feedback

HIPERFACE absolute encoder single or multturn

On board I/O's

for size 1,3 Nm:

3 digital inputs PNP 24 V

2 digital outputs PNP 24 V

1 programmable input/output PNP 24 V

for sizes from 2,8 Nm to 30 Nm:

6 digital IN 24 Vdc general purpose, configurable as:

PSTOP, NSTOP, Enable, Home, Capture, Step/Direction

3 digital OUT 24 Vdc 250mA, general purpose

1 digital IN/OUT 24 Vdc with configurable function

3 differential I/O's configurable as master incremental encoder

1 Analogue IN +/-10 V

Interface:

EtherCAT, CANopen

PROFINET (IBD up to 6 Nm)

Safety:

-For size 1,3 Nm: SIL3 (pending)

-For sizes from 2,8 Nm to 30 Nm:

STO 2 channels (only CAN and ETC)

SIL3 (pending)

Protection:

IP65

Option:

Internal brake

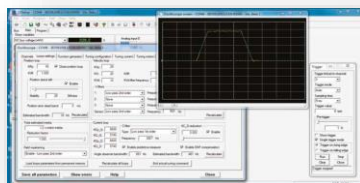
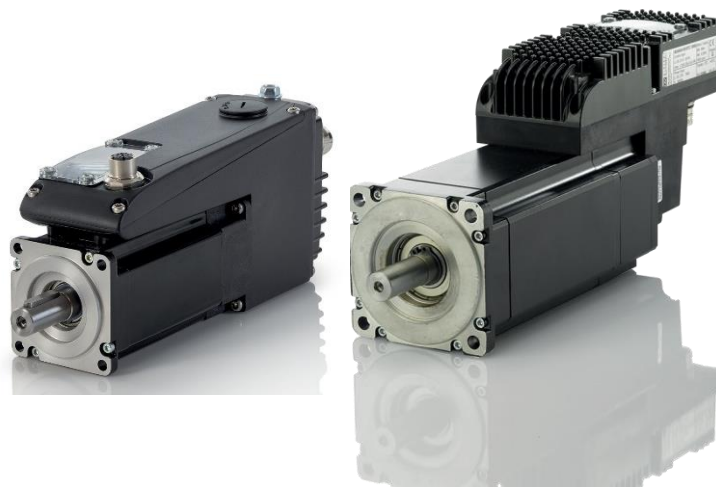


EtherCAT®

CANopen



PROFI®
INDUSTRIAL ETHERNET
NET



SOFTWARE ENVIRONMENT

SD Setup

NBD: Nearby Servo Drives

Drive IP65 for linear and rotating brushless motors

Power supply: 275 ÷ 730Vdc (560Vdc Nominal).

Rated current: 8Arms

Peak motor current: 15Arms

Logic supply: 24Vdc

Protection: IP65

Security: STO 2 channels

Input/Output:

3 digital inputs PNP 24V

2 digital outputs PNP 24V

2 digital input/digital output bidirectional PNP

1 analog input +/- 10V

Encoder master input + 5V out



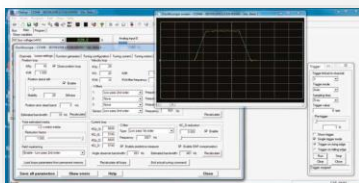
EtherCAT®

CANopen



SOFTWARE ENVIRONMENT

SD Setup



PRODUCTS – STEPLESS SOLUTIONS

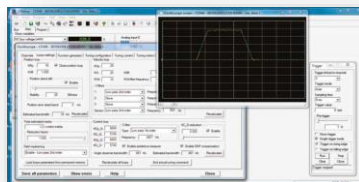
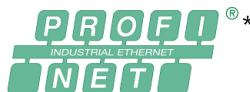
SVM: Stepless Servo Drives

MM: Stepless Motors

Interface: CANOpen, Profibus DP,
±10V, RS485 Modbus, pulse/direction
Profiles of speed, position and torque

Internal PLC programmable in IEC 61131
dedicated and general purpose IN/OUT's

Motors sizes available up to 21 Nm
on 5 sizes, DC power supply up to 160 Vdc



ISD: Integrated Stepless Drives

Up to 12 Nm, DC power supply up to 130 Vdc

Interface: CANOpen, Profibus DP, ±10V,
RS485 Modbus, pulse/direction

Profiles of speed, position and torque

Internal PLC programmable in IEC 61131
dedicated and general purpose IN/OUT's



SOFTWARE ENVIRONMENT

SD Setup

* through external gateway



TSC: Nearby Servo Drives

Drive for 3 stepper motors

Power supply: 48 Vdc

Protection: IP65

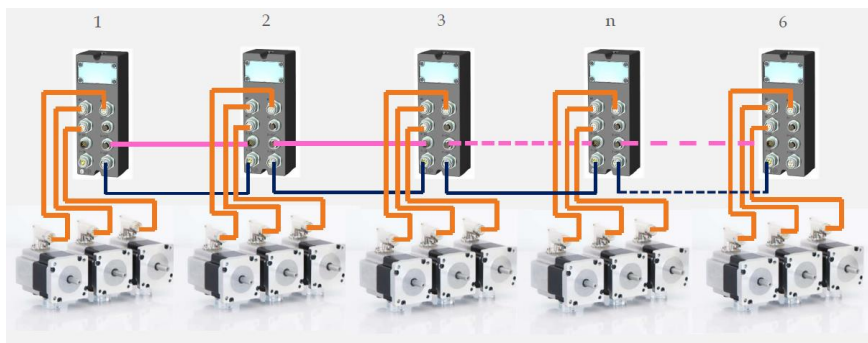
Input: 1 analog input +/- 10V

Daisy chain connection: up to 3 devices

Stepper motors size 60 mm

Torque: 1,65 and 3,1 Nm

Feedback: Absolute single turn encoder



CANopen

PROFI[®] *
INDUSTRIAL ETHERNET
NET



* through external gateway

PT2 Series: HMI

HMI panels

- Premium level panels suitable for Industry 4.0
- Embedded touch system
- Sizes from 4,3" to 15" LCD display
- TFT-LCD
- Max. colors 16-bit
- LED
- CPU: RISC ARM9 32 bit
- Working Memory 64 MB
- USB
- IP66
- 5 years life battery



RS 485
RS 232

EtherNet/IP™

SOFTWARE ENVIRONMENT

Panel Master Designer



PRODUCTS – CUSTOM SOLUTION

CUSTOM PRODUCTS



STEPPER MOTOR CONTROL
CPMSGO



VIBRATING FEEDERS CONTROL
CP6V16



POWER SUPPLY
FOR ISD AND SVM DRIVES
SDPOW1 - SDPOWR



LOAD CELLS ACQUISITION
SGACQA



VIBRATING FEEDERS CONTROL
CP4PWM



POWER SUPPLY
FOR IBD AND NBD DRIVES
BDPOW

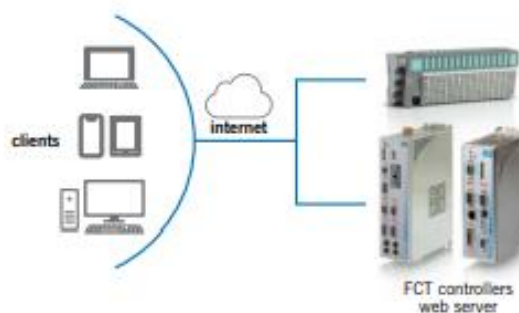
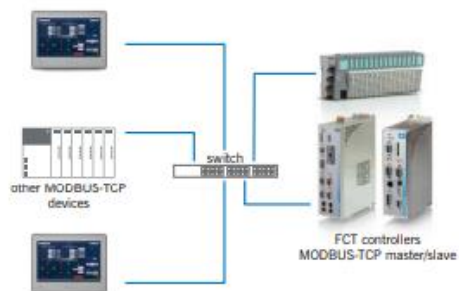
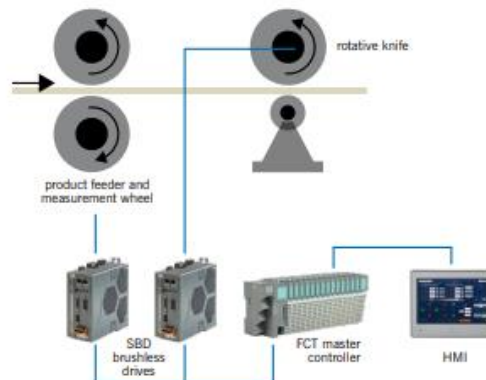
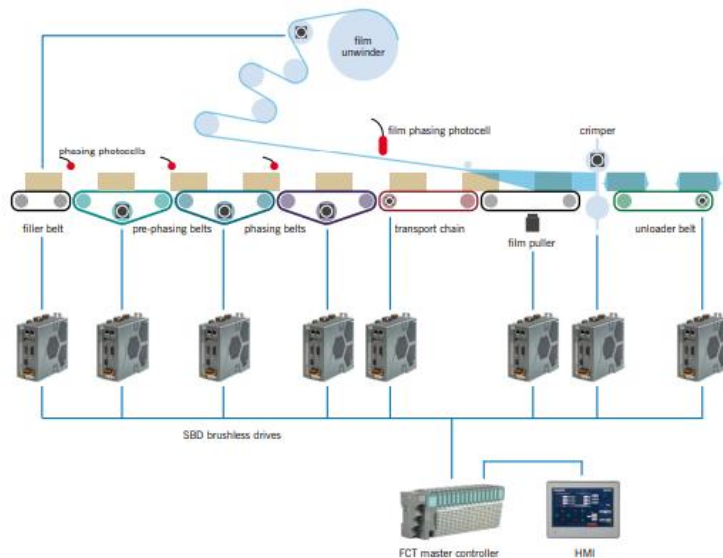


THERMOCOUPLES
CP6TS0



FCT300 & FCT200
I/O LOCAL MODULES

SOFTWARE: Codesys Solutions

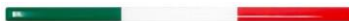


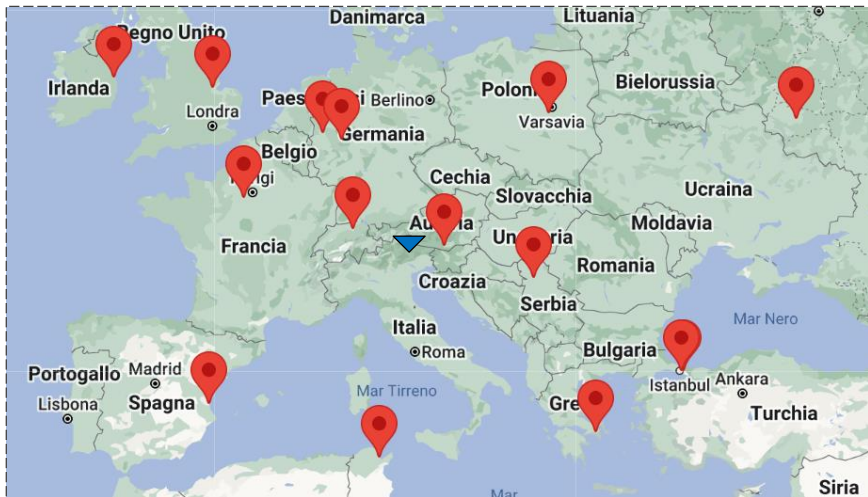
COMPANY

APPLICATIONS

PRODUCTS

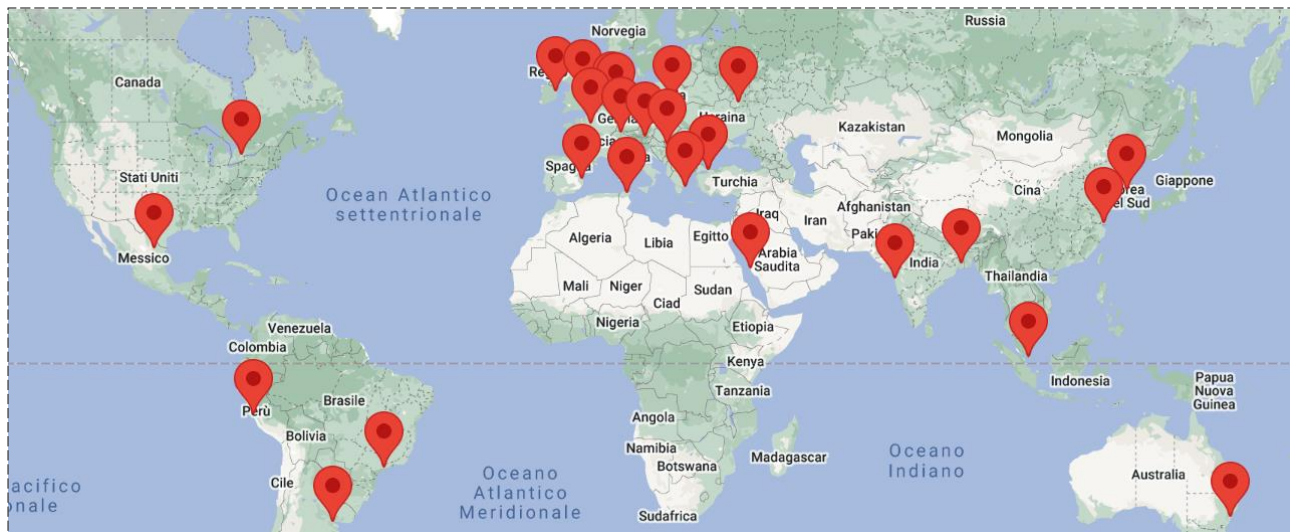
WHERE WE ARE





▲ CMZ HQ

▼ AUTOMATION PARTNERS

cmz.it/en/automation-partners

CMZ

Company profile



cmz.it



CMZ SISTEMI ELETTRONICI Srl

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