

# CMZ

Company profile

soga  energyteam

## SYSTEMS & SOLUTIONS FOR MOTION CONTROL

2024



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

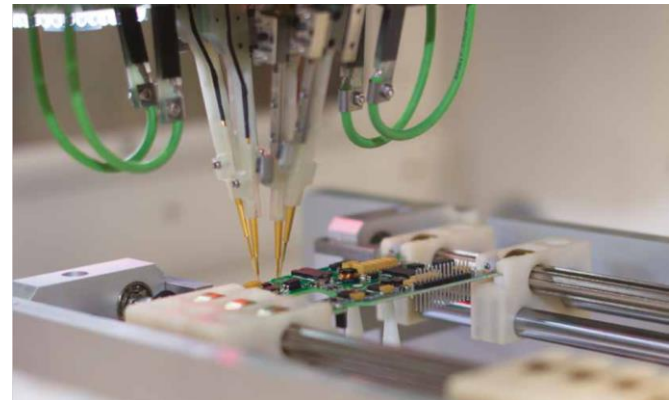
## SOFTWARE

- Communication, motion and utility libraries
- Configurable dedicated Applications

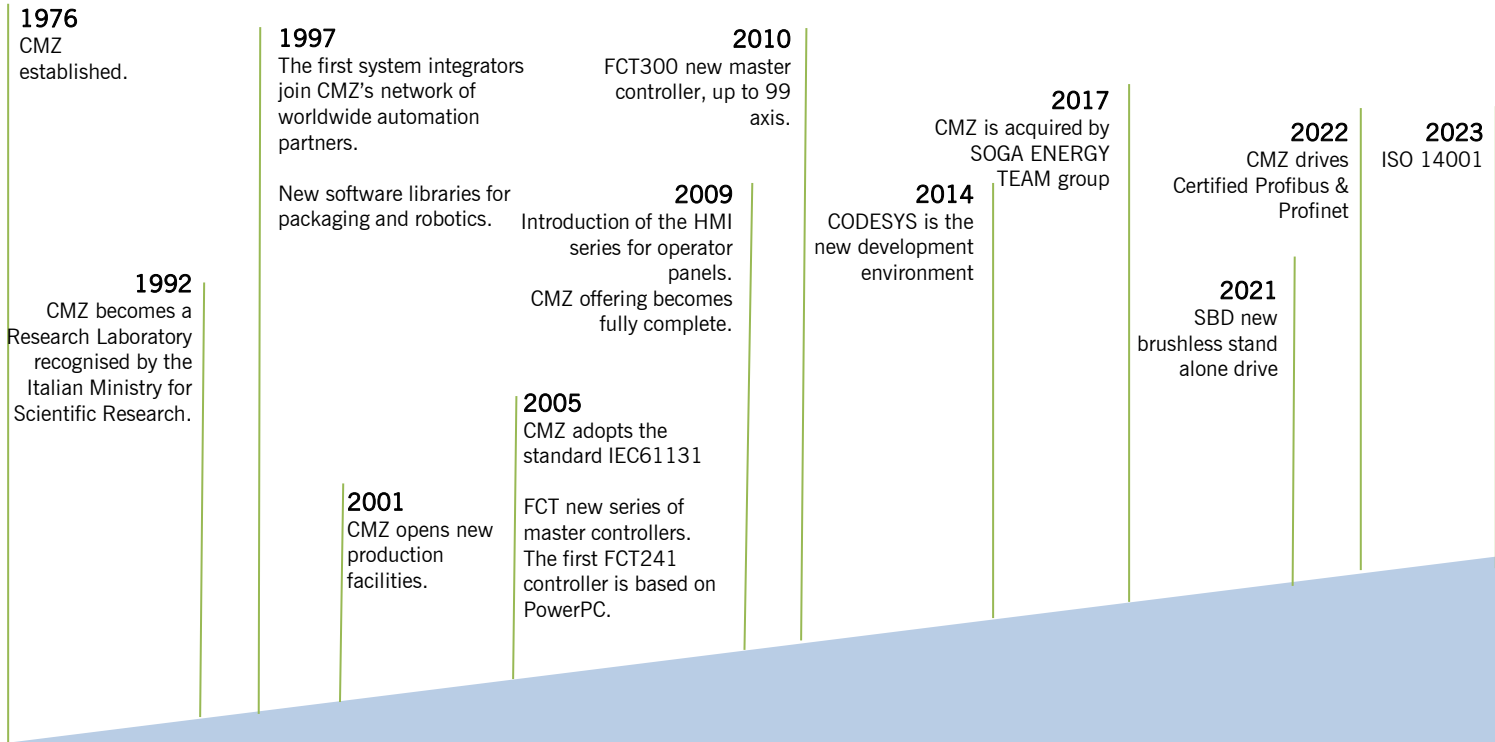
## SERVICE

- 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**



## KEY MILESTONES



Volume of Business 2023  
(Order Intake, mln €)

10,0



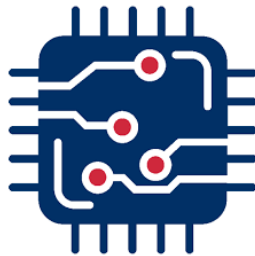
Headcount



65

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

18,3%



# of R&D SW and HW  
engineers

28



## ISO 9001:2015



## ISO 14001:2015



Our first ESG Rating.  
CMZ is in category BBB



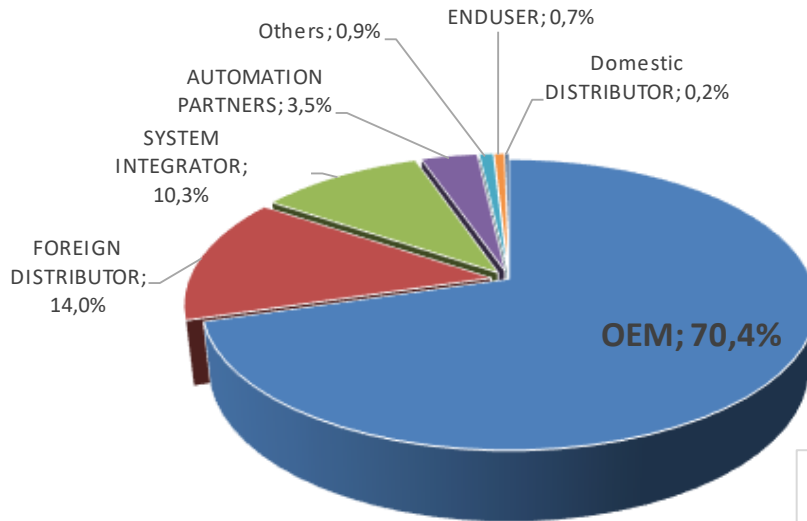


**SOGA S.p.A**

Group headquarter

COMPANIES	BRANDS	
Soga S.p.A	 <b>soga®</b> Motori elettrici AC <i>AC electric motors</i>	ENERGY
	 <b>sincro®</b> Alternatori e saldatrici AC e DC <i>AC and DC alternators and welders</i>	
	 <b>wage</b> Generatori PTO con attacco a cardano <i>PTO tractor-driven generators</i>	
	 <b>sogaenergies</b> Alternatori AC per rinnovabili e progetti speciali <i>AC generators for renewables and special projects</i>	
Sincro d.o.o	Alternatori industriali <i>Industrial alternators</i>	AUTOMATION
CMZ Sistemi Elettronici S.r.l	 <b>CMZ</b> Sistemi elettronici per l'automazione industriale <i>Electronic systems for industrial automation</i>	
Veneta Press S.p.A	 <b>VENETA PRESS</b> Pressofusioni in alluminio <i>Aluminium die-casting</i>	FOUNDRY

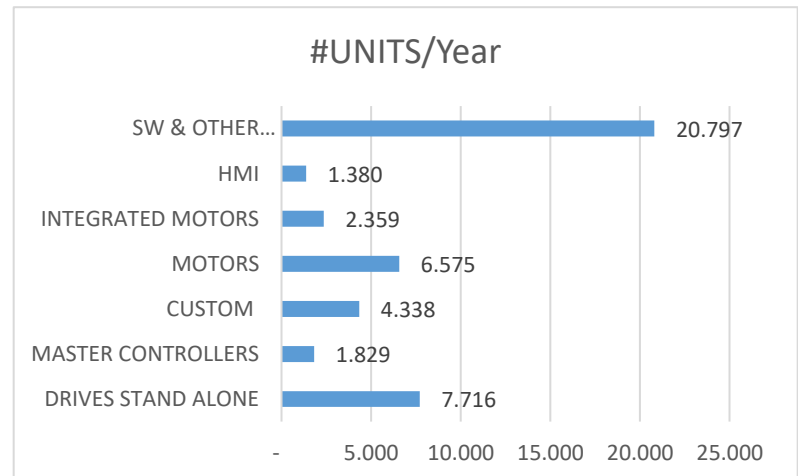
- 6 brands
- Group Turnover 80.000.000,00 € (results 2023)
- 7 production plants in Italy and Croatia
- Export in 90 countries
- ~ 400 employees



With a team of 28 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:

- 500 Active Clients
- 250.000 Units





COMPANY

APPLICATIONS

PRODUCTS

WHERE WE ARE



## KEY APPLICATION MARKETS



Packaging

24,3%



Dosing &  
Weighing

9,0  
%



Beverage

20,2  
%



Converting

7,2  
%



Special  
Machines

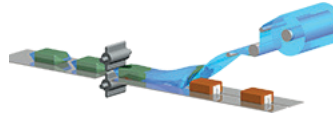
24,9%



Textile

14,4%

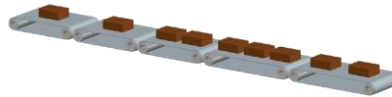
## Packaging



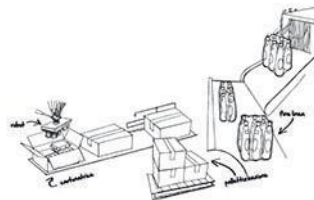
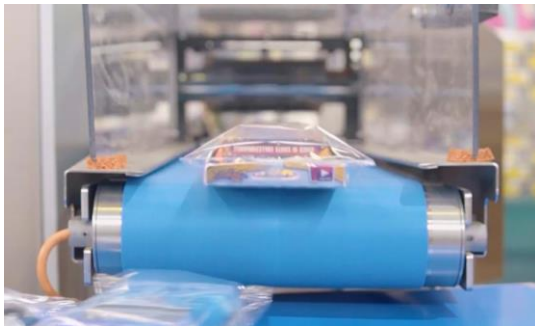
HORIZONTAL PACKAGING MACHINE



VERTICAL PACKAGING MACHINE



LOADING SYSTEMS  
SMART BELTS

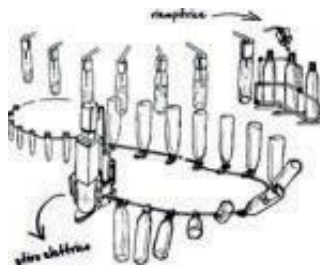


END LINE

## Food & Beverage

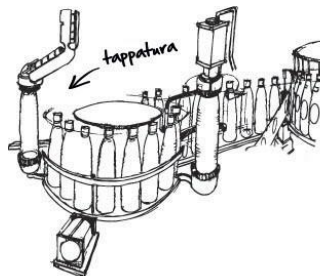


LABELLING MACHINES



FILLING MACHINES

BLOWING MACHINES



CAPPING MACHINES

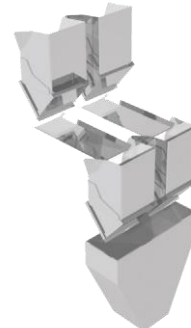
## Dosing & Weighing



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)



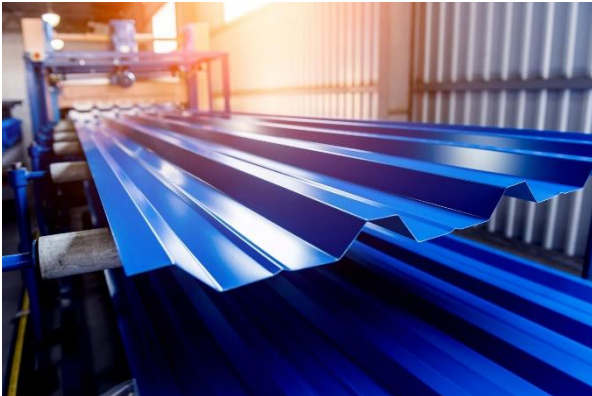
CNC MACHINES

## Glass



THREADING MACHINES  
SEALING MACHINES EDGERS  
MACHINES COATING  
REMOVERS  
GLASS CUTTING

## Metal sheet



FLYING SHEAR  
DEFORMATION



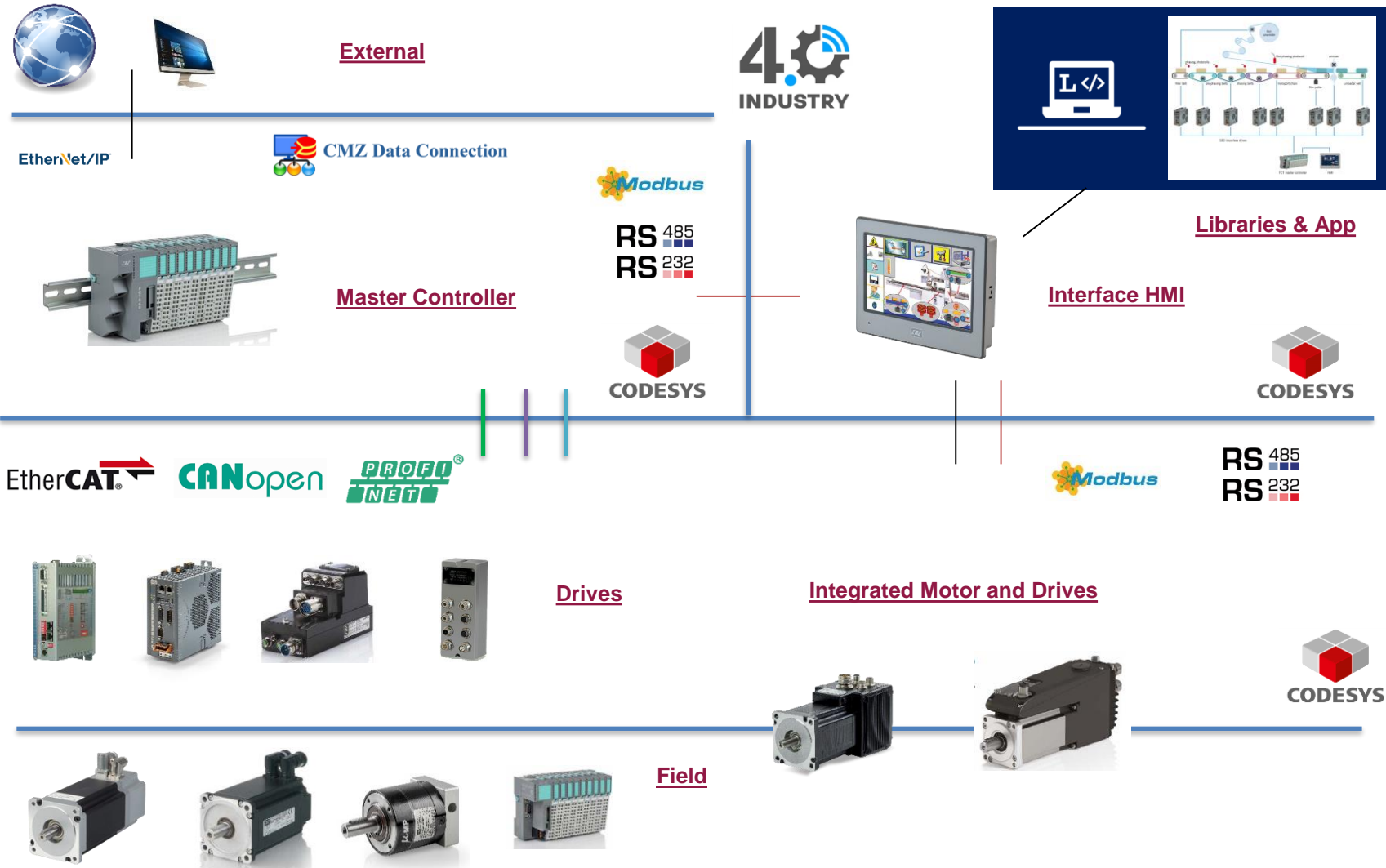
COMPANY

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

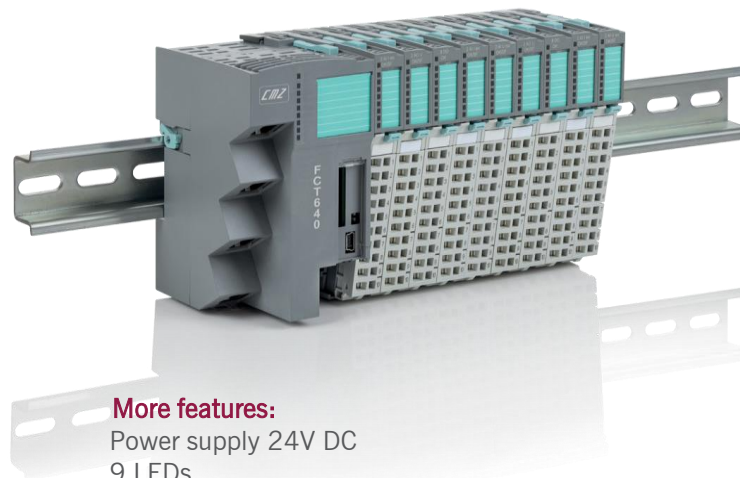
##### Connectivity:

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



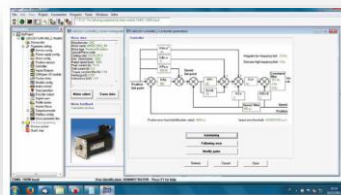
### RP064: I/O module

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



CMZ PROPRIETARY  
SOFTWARE ENVIRONMENT

CANopen



## PRODUCTS – SERVO MOTORS

### MMD/B/S: Servo Motors

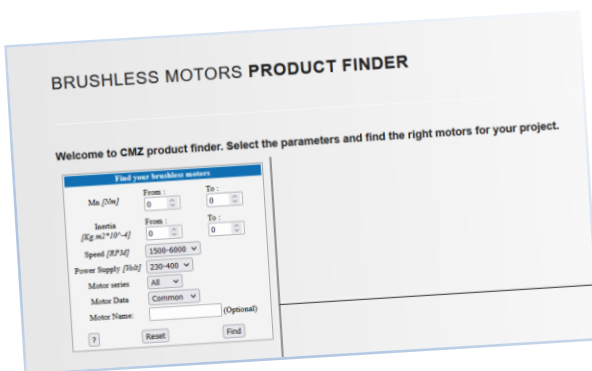
Brushless motors



#### WEB CONFIGURATOR

TRY IT ON OUR WEBSITE!

[www.cmz.it/en/brushless-motors-product-finder/](http://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



**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 multiturn

**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

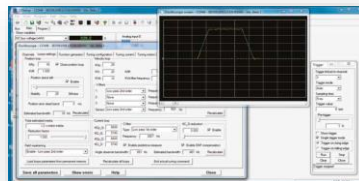
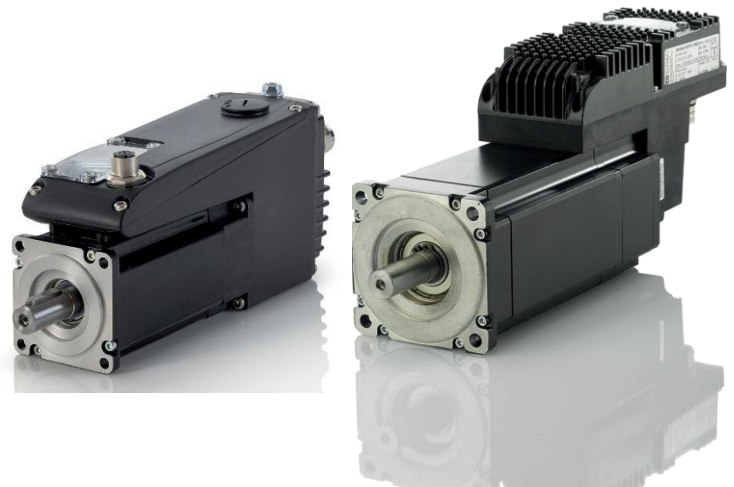


EtherCAT®

CANopen



PROFI®  
INDUSTRIAL ETHERNET  
NET



## SOFTWARE ENVIRONMENT

SD Setup



## NBD: Nearby Servo Drives

Drive IP65 for linear and rotating brushless motors



EtherCAT®

CANopen

**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

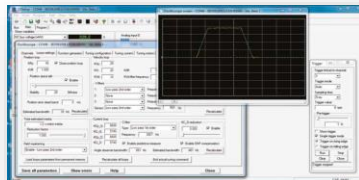
1 analog input +/- 10V

Encoder master input + 5V out



## SOFTWARE ENVIRONMENT

SD Setup





## PRODUCTS – STEPLESS SOLUTIONS

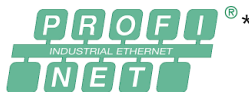
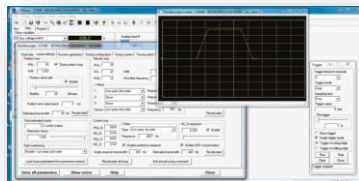
### SVM: Stepless Servo Drives

### MM: Stepless Motors

Interface: CANOpen, Profibus DP,  $\pm 10V$ , 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,  $\pm 10V$ ,  
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

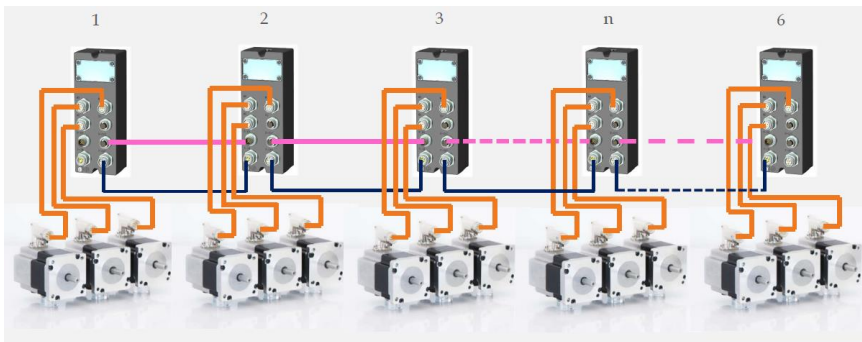
**Input:** 1 analog input +/- 10V

**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<sup>®</sup> \*  
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



## 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**

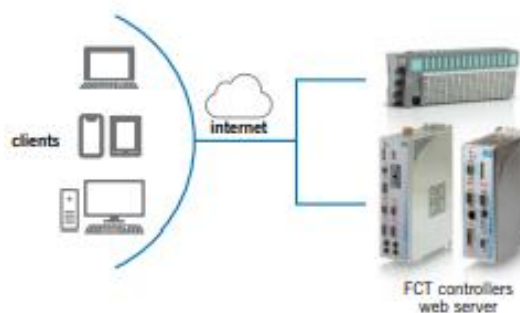
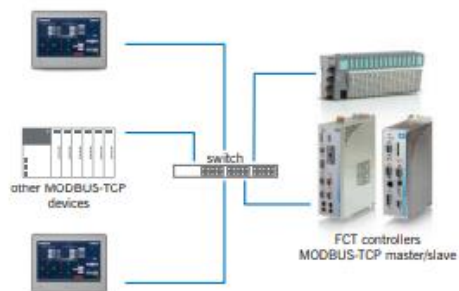
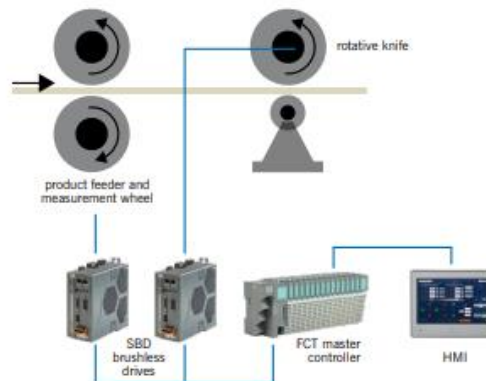
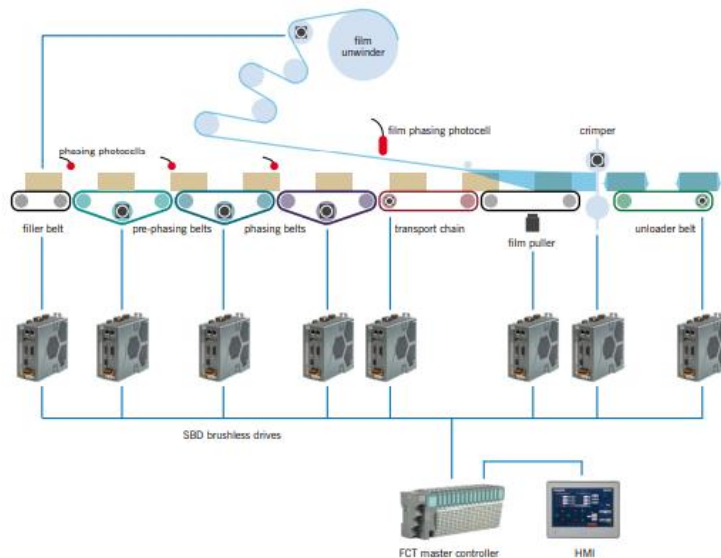


THERMOCOUPLES  
**CP6TS0**



FCT300 & FCT200  
**I/O LOCAL MODULES**

## SOFTWARE: Codesys Solutions



COMPANY

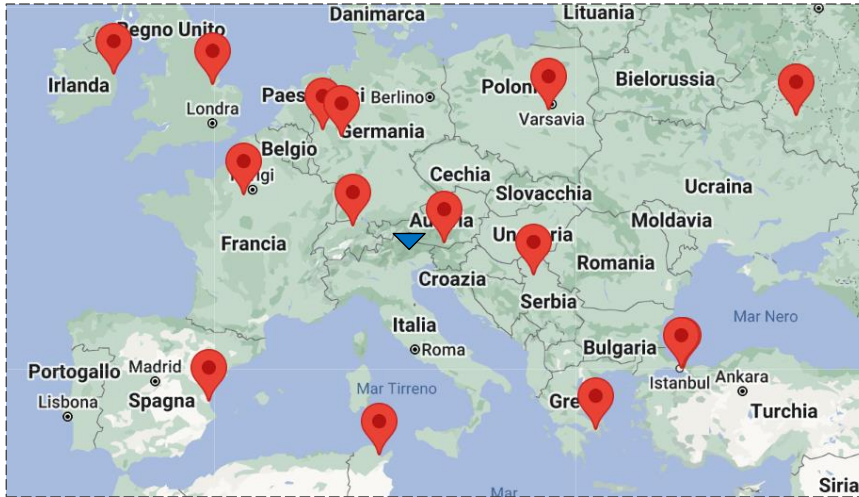
APPLICATIONS

PRODUCTS

WHERE WE ARE



# AUTOMATION PARTNERS NETWORK WORLDWIDE



CMZ HQ

AUTOMATION PARTNERS

[cmz.it/en/automation-partners](https://cmz.it/en/automation-partners)







cmz.it



**CMZ SISTEMI ELETTRONICI Srl**  
Via dell'Artigianato, 21 - Vascon di Carbonera 31050 (TV) ITALY  
Phone +39 (0)422 447411 [cmz@cmz.it](mailto:cmz@cmz.it)