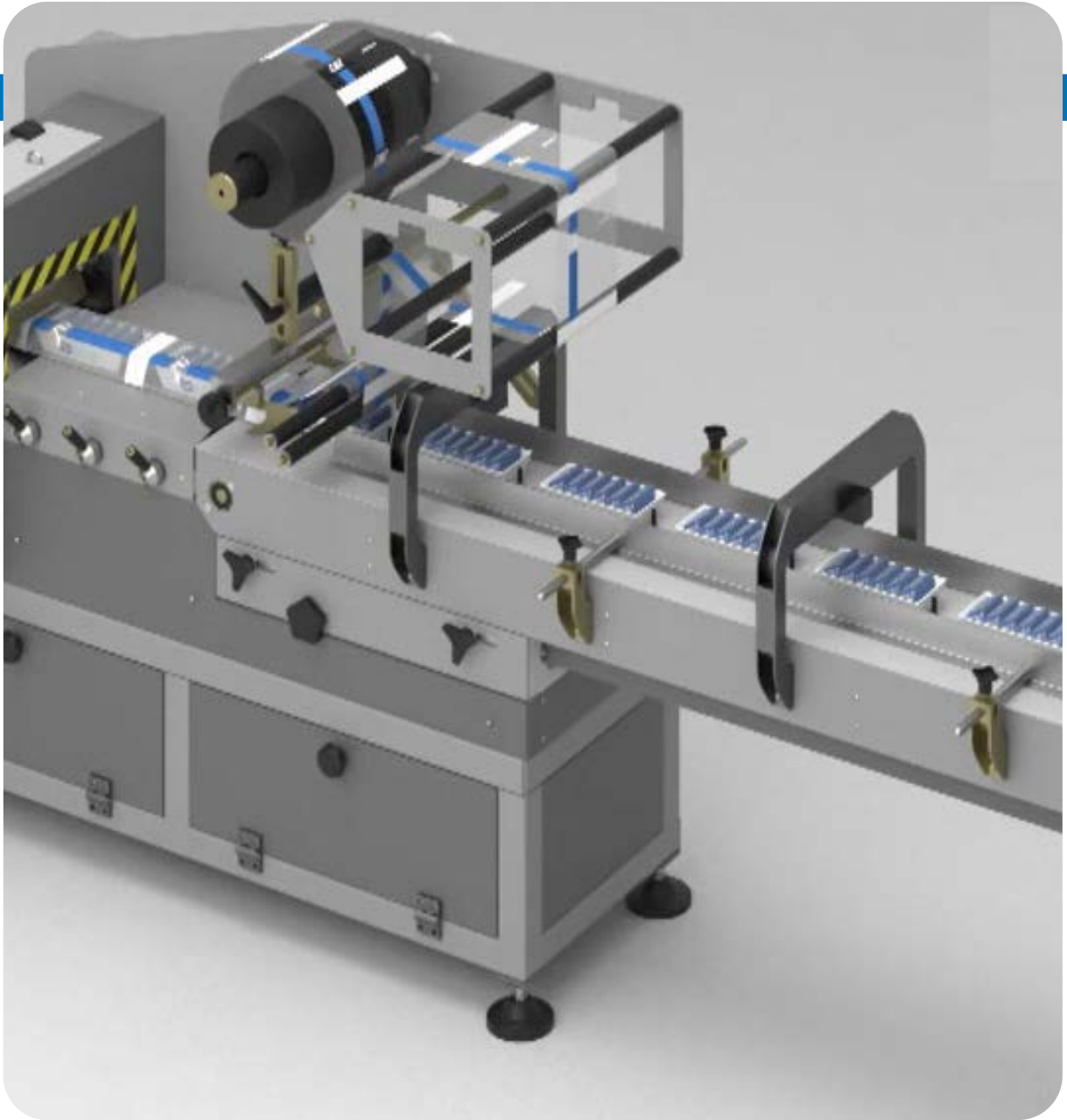# Horizontal Form Fill Seal (HFFS)
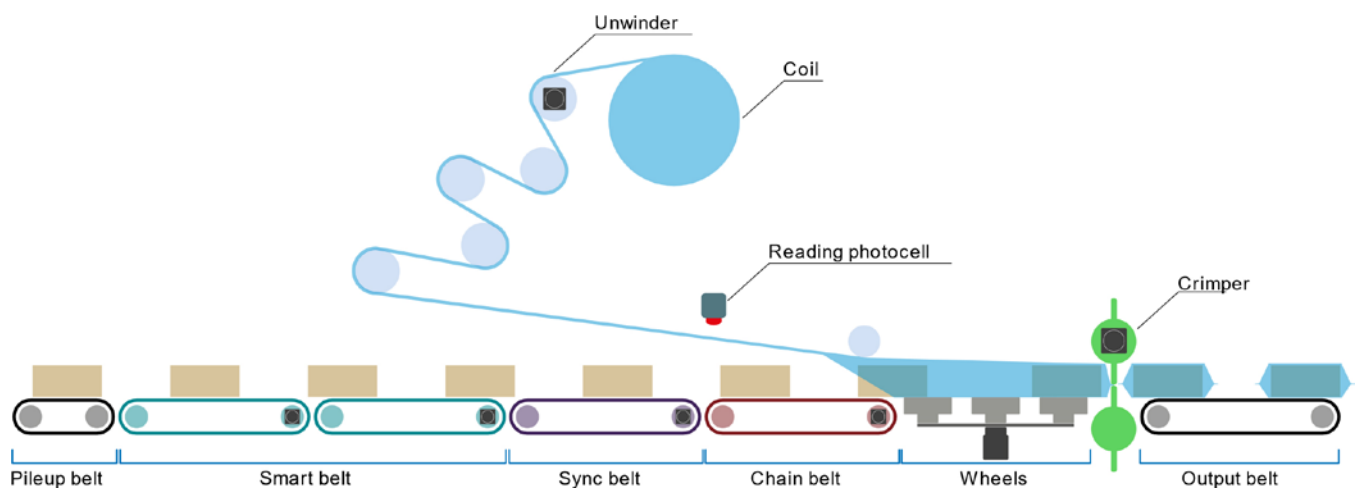
CMZ OFFERS A COMPLETE SOLUTION FOR THE MANAGEMENT OF THE HORIZONTAL PACKAGING MACHINE.

This machine performs the following operations with continuous motion:

- Package formation
- Product insertion
- Longitudinal sealing
- Transverse sealing

The entire process takes place horizontally, ensuring an efficient and automated production flow.

APPLICATION VERSIONS

The horizontal packaging machine is available in the following versions:

- **BASIC:** up to 4 synchronized axes
- **PLUS:** up to 8 synchronized axes
- **HIGH DYNAMIC:** with more than 8 synchronized axes
- **SLIM:** the HFFS Slim is a version with reduced functionalities compared to the HFFS. It meets the following market requirements:

- management of machines with 3 axes and reduced functionality/ services/configuration
- software customizable by the customer
- HMI, motors, and drives from third parties
- possibility of AddOns (already developed by CMZ)

DEVICES

CMZ allows the management of different devices of the horizontal packaging machine, categorized as follows:

- Interfaces and signals
- Interface with the upstream machine
- Product feeding system
- Product loading
- Film feeding and package formation
- Package sealing and cutting
- Package unloading
- Interface with the downstream machine
- Temperature regulation
- Acoustic/visual signals

CMZ OFFERING

		Base supply	Optional supply
SW	CODESYS Application	●	
SW	HMI Application	●	
SW	Managing TB20 modules to remote the I/Os	●	
SW	Managing of inverters	●	
SW	Managing of Industry 4.0	●	
SW	Customization to be defined		●
SW	Managing servo drives other than CMZ*		●
SW	Managing motors other than CMZ*		●
SW	Managing HMI other than CMZ*		●
SW	Customization: synchronization tape of the incoming product to the chain		●
SW	Customization: accumulation tapes, with capping function (up to 4 tapes)		●
SW	Customization: product level control for adjusting production speed		●
SW	Customization: auxiliary film pull roller (film feed)		●
SW	Customization: automatic film reel change, with second unwinder management		●
Service	Documentation to modify the software, use the interface and make the wiring diagram	●	
Service	3-day ACADEMY course on: • general application • program on FCT • program on HMI • AddOn • commissioning management	●	
Service	1-day ACADEMY course on devices (if not familiar)		●

		Base supply	Optional supply
HW	Controller: FCT640, FCT641	●	
HW	HMI	●	
HW	Drives SBD M / SBD L / SSD / IBD / ISD e NBD: nr. 3	●	
HW	Brushless motors from CMZ's catalog: nr. 3	●	
HW	TB20 Digital Input Modules: the type and number of modules depend on how many digital inputs are needed	●	
HW	TB20 Digital Output Modules: the type and number of modules depend on how many digital outputs are needed	●	
HW	TB20 IO modules: the type and number of modules depend on how many temperature sensors are needed and their type (thermocouples and/or resistance thermometers)	●	
HW	TB20 Analog Output Modules: the type and number of modules depend on how many analog outputs are needed	●	
HW	Router	●	
HW	TB20 modules to remote I/O: the type and number of modules depends on what and how many I/Os are needed		●
HW	Inverter film unwinder		●
HW	Inverter tape unwinder output		●

subject to verification by CMZ