Operator panel

Fully integrated automation of all operations including production management on HMI: touch panels for production control, weight control in real time, communication with all parties in the line and remote support

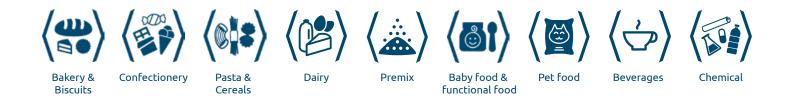
> Touch panel 4-15" Siemens and Allen Bradley CEPI native PLC LCD Display Weight control in real time with HMI Communication Remote support

> > l

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Operator panel

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CEPI provides a turn-key system that includes the automation. Hardware and software design is done completely in-house, and each system is the result of a decades long experience of parallel development alongside the mechanical side. With a team of 24 programmers, we provide technical and human continuity through the development of a project that can become highly specific and complex. Our solutions provide full horizontal and vertical integration, managing dialogue and data received by other partners operating in the lines, after the dosing and before the raw ingredients management.

For the management of production operations, different HMIs are provided to match diverse needs:

- Customized 4-15" touch panel on Siemers or Allen Bradley platform, for non-typical processes
- CEPI native PLC Leonardo for typical processes
- Weighing processor WP140 with LCD display for simple one line productions
- Local control box for weight control in real time

The automation team provides full 24/7 support which includes:

- testing, optimization, start-up and training
- remote support on all tools with live visualization on VPN network
- remote management of production and intervention on the source code
- virtual and personalized tutorials
- live assistance with dedicated devices
- support from local teams who are fully trained in our devices and are part of our global network





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Operator panel

Customized PLC with HMI

Production management Recipe management Ingredient and hopper parametrization Overview

Touch panel 4 - 15" Siemens Touch panel 4 - 15" Allen Bradley PC Mobile device

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Leonardo

Production management 15" Standard production process (CEPI native PLC)

WP140

Production management LCD Display 1 line (Electromechanical automation)

Weight control in real time

Local control box with HMI

Remote support

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Production management



Customized PLC

4 - 15" touch panels on Siemens and Allen Bradley platforms Production management, recipe management, synoptic overview, ingredient and hopper parametrization Non standard production process PC and mobile device







Leonardo 15" CEPI native PLC Production management Standard production processes



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Automation **Operator panel**

Custom PLC: Production management

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3	71	SALT	1.600	1.600	0.000	0000000000	B5	SKIP		WAIT.				PAU
4	21	Sugar	62.500	62.500	0.000	000000000	Nr	Name		Set[Kg]	Net[Kg]	Tol. [Kal	Tot [K
5	1	WATER	72.000	72.000	0.000	000000000	0			0.00	0.00	±		***
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7	0	UNLOAD	0.000	0.000	0.000	000000101	Nr	Name		Set[Kg]	Net[Kg]	Tol. [Tot [K
8	12	FLOUR 2	300.000	300.000	0.000	0000000000	0			0.000	0.000	± (0.000	
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14	0		0.000	0.000	0.000	0000000000								

Production control on multiple lines Hopper control Remote and local production modality Single dosing Report Communication with SQL server Communication with mixer





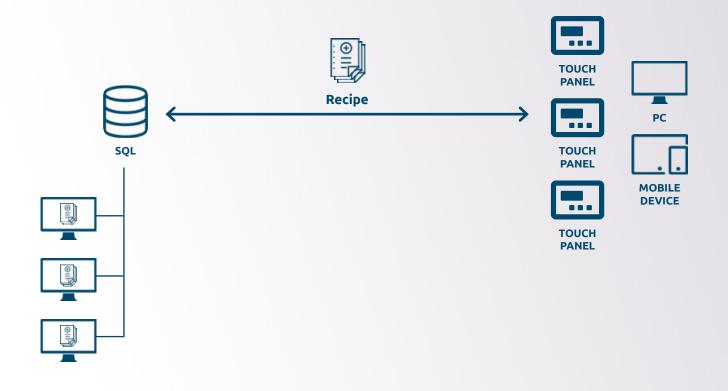
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Custom PLC: Recipe management

RODUCTI	ON SINGLE		SYNOPTIC		RECIP	PES	MENÙ		SILENC	1	RESET AL GENERA
N.	Name		Nr 30	Nan		TEA L3	Tot [45	Kg] 2.800	12	/02/201	6 20:36:45
16	GINGER L2			\square	L1	2	:	🖌 ЦЗ	6	2 L4	
17	RICH TEA L2			N. pas	N. pro.	Name produ		SET [Kg]	Spd %	T [°C]	Unloading
18	MALTI L4		>	1	21	Sugar	1	62.500	0	0.0	
19	SNOWY L4	2	📃 🔊	2	1	WATE	2	76.000	0	0.0	
19	SINOWY L4		>	3	61	SALT		1.600	0	0.0	
20	MALTY L2	D	>	4	64	AMMONI	UM	11.500	0	0.0	
21	Sugar water	2	2	5	63	SODIU	м	1.200	0	0.0	
22	sugar water	D	>	6	69	TRASF B6	>B3	14.300	0	0.0	0000100000
23	RICH TEA Linew	3	>	7	0	UNLOA	D	0.000	0	0.0	000000101
	NACIT IEN EARCH		D	8	11	FLOUR	1	300.000	0	0.0	
24	sugar water	D	>	9	0	UNLOA	D	0.000	0	0.0	000000010
25	test I3	D	>	10	0			0.000	0	0.0	
26	micro l1	D	>	11	0			0.000	0	0.0	
27	ammoniun I1	2	>	12	0			0.000	0	0.0	
20	euser water		>	13	0			0.000	0	0.0	

Create recipes for lines and installation, send them to traceability software and viceversa





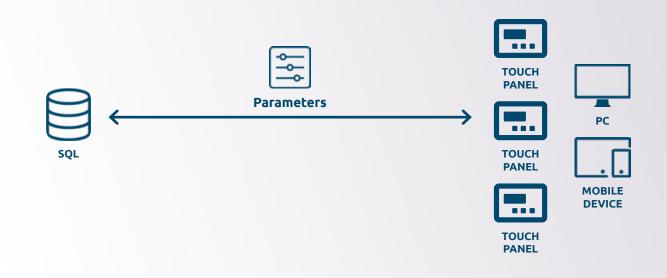
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Custom PLC: Parameters

PRODUCTION	SINGLE SYNOPTIC	RECIPES	MENÙ	SILENCE SIREN	RESET ALL GENERAL
LINE 1	LINE 2	LINE 3	LIN	E 4	PRODUCTS
NUMBER PROD	оист	-	8	+	SILO
Name		FAT			CHANGE PARAM
NUMBER SILO			8		LOGOUT
TOLERANCE[K	9]		0.000		
CHANGE MAXI	MUM SET [kg]		0.000		
WAITING TIME	E [S]	6	00.000		
QUEUE [Kg]			0.000		
QUEUE TIME [s]		5.000		
CORR. QUEUE	%		0		
PRESET [Kg]			10.000		
HIGH SPEED %	ò		58		

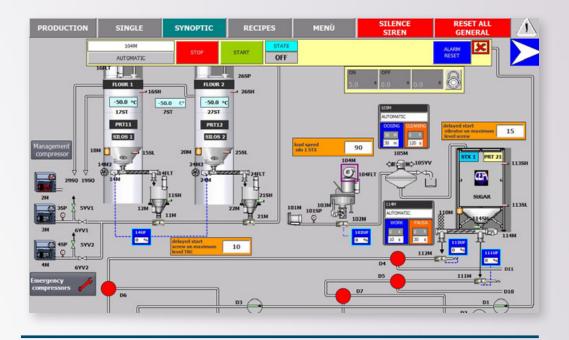
Product parameters, hopper parameters, temperature parameters, system parameters





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Synoptic overview



Overview of installation, silos, hoppers and utilities Maintenance with manual working modality

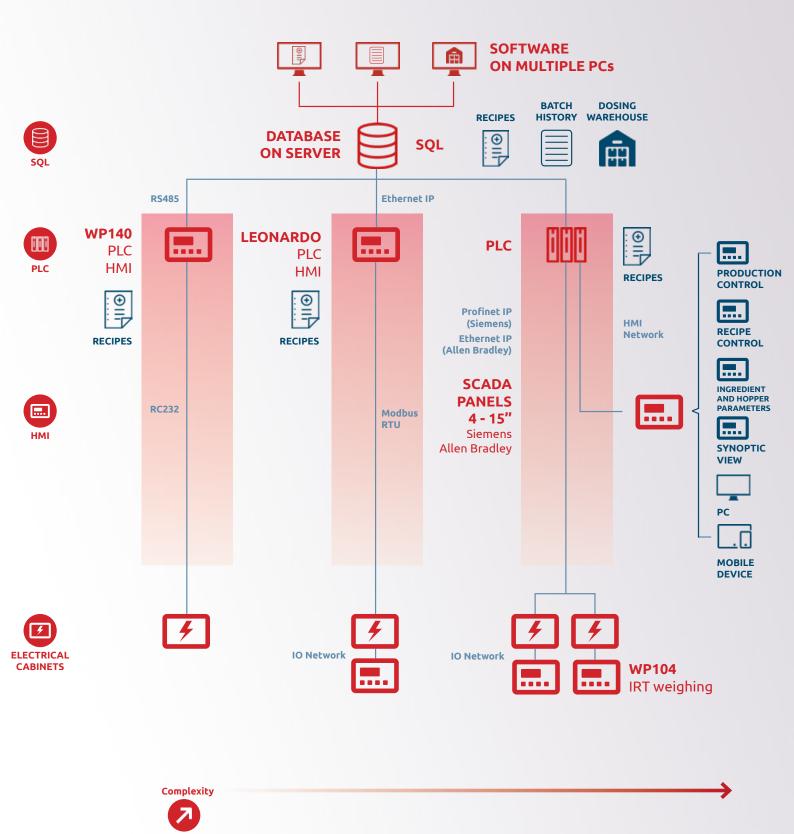




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Architecture of the automation system



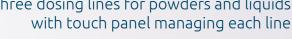
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Three dosing lines for powders and liquids with touch panel managing each line





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Product and process analysis Engineering and control Direct manufacture Project management Installation and commissioning Monitoring and service



CE







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Bakery & biscuits

Confectionery Pasta & Cereals Dairy Premix **Functional food Baby food** Pet food Chemical Pharmaceutical