

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



Bakery &
Biscuits



Confectionery



Pasta &
Cereals



Dairy



Premix



Baby food &
functional food



Pet food



Beverages



Chemical

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 Siemens 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



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



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

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



WP 140

HMI with LCD display
Production management
1 line

Custom PLC: Production management

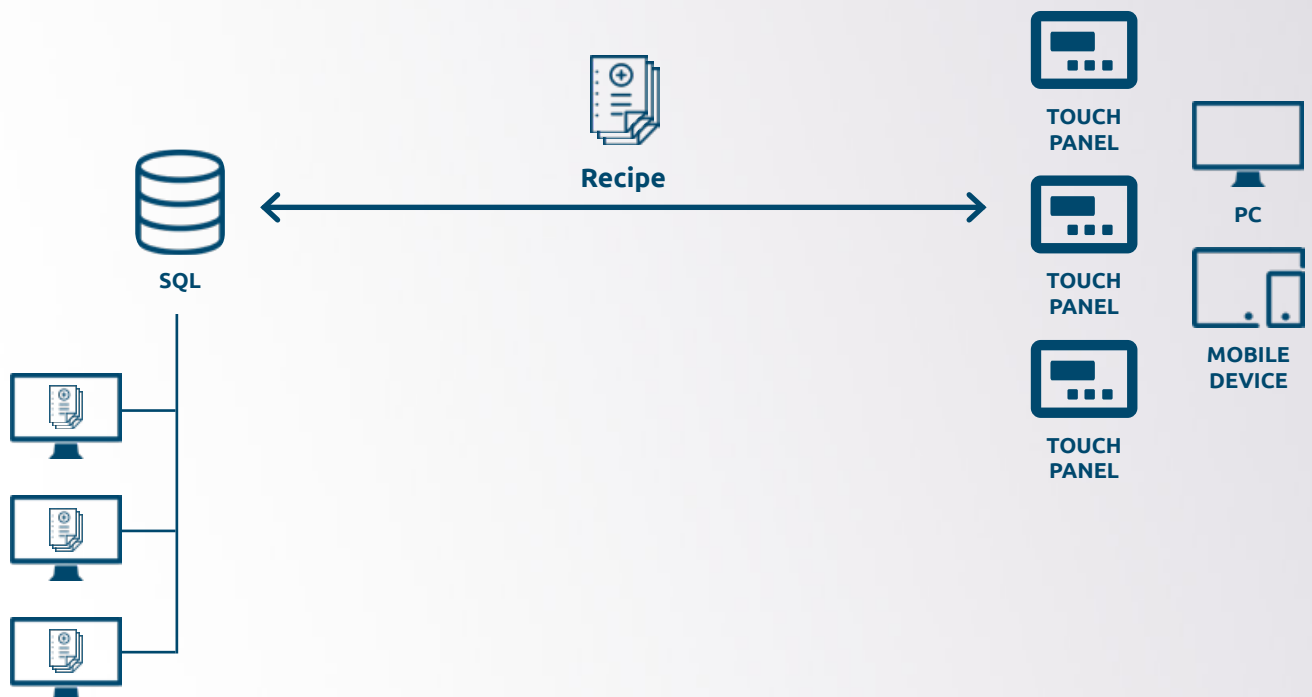
PRODUCTION		SINGLE		SYNOPTIC		RECIPES		MENÙ		SILENCE SIREN		RESET ALL GENERAL		
MIXER 1		MIXER 2		MIXER 3		MIXER 4		CONTROL LOC PCI PC2   		B1 SKIP WAIT. DOS.		PAUSE		
Nr	Name	CyclesSet	CyclesNet	%	Weight Net [kg]	Weight Net [kg]								
23	RICH TEA L1new	1	0	100.0	448.8	448.8								
START		STOP		DOS. PAUSE		PAUSE		UNLOAD		FPD E. 0.1				
NR	Pro	Name Product	ORIG[Kg]	SET[Kg]	DOS[Kg]	SCR								
1	73	SODIUM	1.200	1.200	0.000	0000000000								
2	74	AMMONIUM	11.500	11.500	0.000	0000000000								
3	71	SALT	1.600	1.600	0.000	0000000000								
4	21	Sugar	62.500	62.500	0.000	0000000000								
5	1	WATER	72.000	72.000	0.000	0000000000								
6	79	TRANSF B7>B3	14.300	14.300	0.000	0001000000								
7	0	UNLOAD	0.000	0.000	0.000	0000000101								
8	12	FLOUR 2	300.000	300.000	0.000	0000000000								
9	0	UNLOAD	0.000	0.000	0.000	0000000010								
10	0	-----	0.000	0.000	0.000	0000000000								
11	0	-----	0.000	0.000	0.000	0000000000								
12	0	-----	0.000	0.000	0.000	0000000000								
13	0	-----	0.000	0.000	0.000	0000000000								
14	0	-----	0.000	0.000	0.000	0000000000								

B2 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.00	0.00	± 0.0	0.00
B3 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.00	0.00	± 0.0	0.00
B4 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.000	0.000	± 0.000	0.000
B5 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.00	0.00	± 0.0	0.00
B6 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.000	0.000	± 0.000	0.000
B7 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.00	0.00	± 0.0	0.00
B8 SKIP WAIT. DOS.				PAUSE	
Nr	Name	Set[Kg]	Net[Kg]	Tol. [Kg]	Tot [Kg]
0	-----	0.00	0.000	± 0.000	0.00

Custom PLC: Recipe management

PRODUCTION	SINGLE	SYNOPTIC	RECIPES	MENÙ	SILENCE SIREN	RESET ALL GENERAL
N.	Name	Nr	Name	Tot [Kg]	12/02/2016 20:36:45	
16	GINGER L2	30	RICH TEA L3	452.800		
17	RICH TEA L2		<input checked="" type="checkbox"/> L1 <input checked="" type="checkbox"/> L2 <input checked="" type="checkbox"/> L3 <input checked="" type="checkbox"/> L4			
18	MALTI L4		N. pas	N. pro.	Name product	SET [Kg]
19	SNOWY L4		1	21	Sugar	62.500
20	MALTY L2		2	1	WATER	76.000
21	Sugar water		3	61	SALT	1.600
22	sugar water		4	64	AMMONIUM	11.500
23	RICH TEA L1new		5	63	SODIUM	1.200
24	sugar water		6	69	TRASF B6>B3	14.300
25	test I3		7	0	UNLOAD	0.000
26	micro I1		8	11	FLOUR 1	300.000
27	ammonium I1		9	0	UNLOAD	0.000
28	sugar water		10	0	0.000	0.0
			11	0	0.000	0.0
			12	0	0.000	0.0
			13	0	0.000	0.0

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

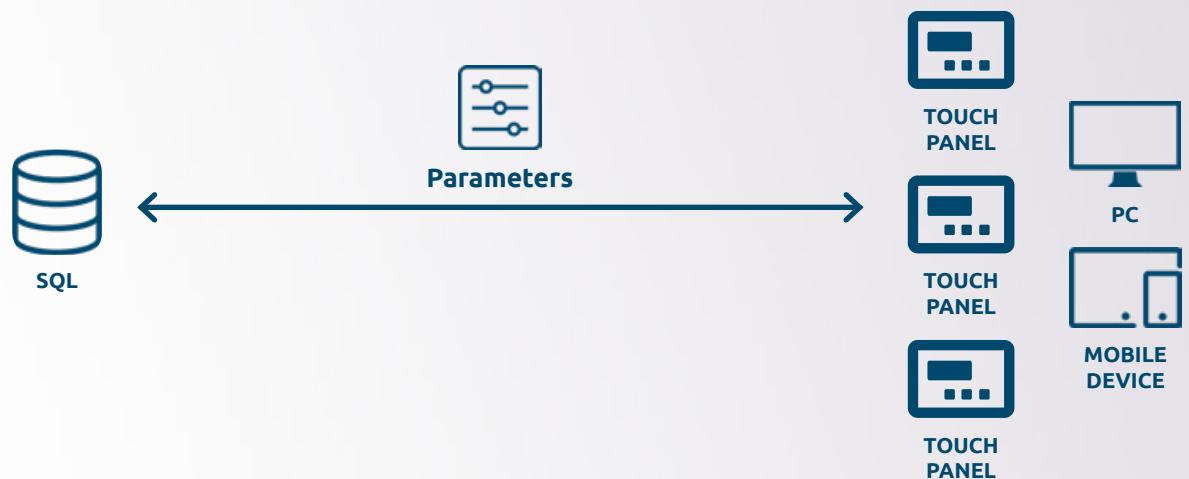


Custom PLC: Parameters

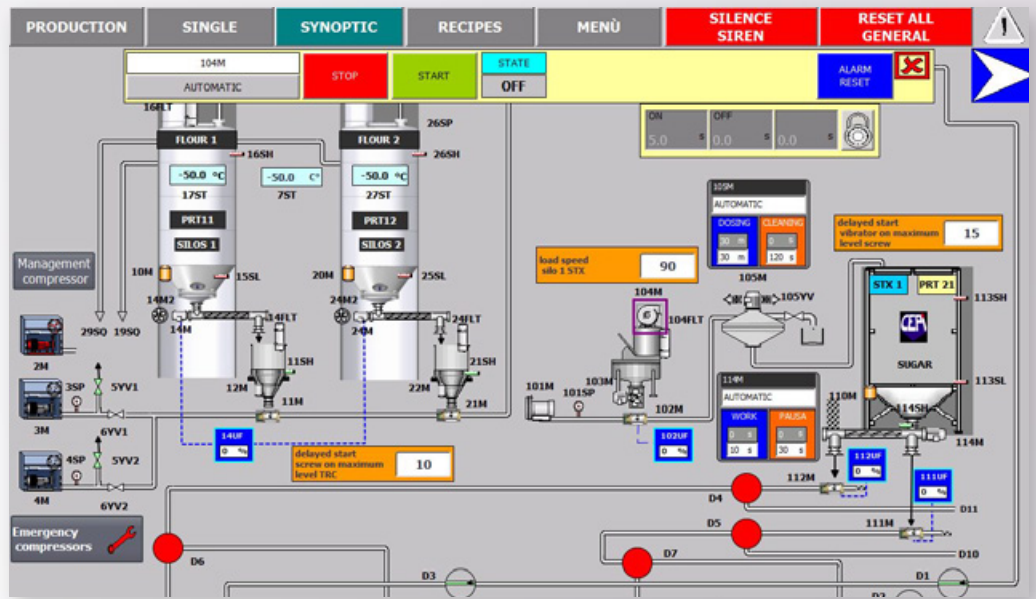
PRODUCTION	SINGLE	SYNOPTIC	RECIPES	MENÙ	SILENCE SIREN	RESET ALL GENERAL	!
LINE 1	LINE 2	LINE 3	LINE 4				
NUMBER PRODUCT				-	8	+	
Name				FAT			
NUMBER SILO				8			
TOLERANCE[Kg]				0.000			
CHANGE MAXIMUM SET [kg]				0.000			
WAITING TIME [S]				600.000			
QUEUE [Kg]				0.000			
QUEUE TIME [S]				5.000			
CORR. QUEUE %				0			
PRESET [Kg]				10.000			
HIGH SPEED %				58			

PRODUCTS
SILO
CHANGE PARAM
LOGOUT
PASSWORD

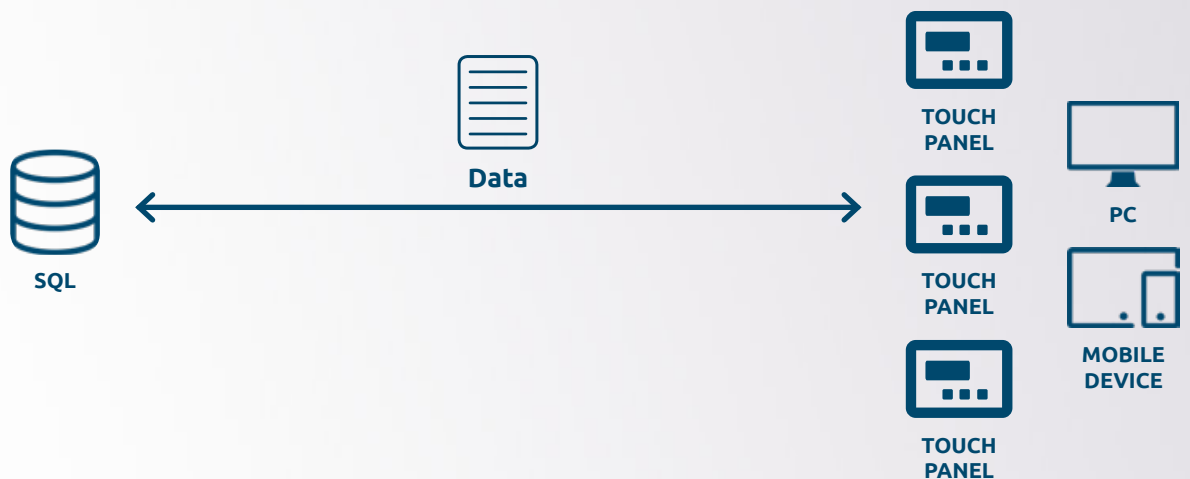
Product parameters, hopper parameters, temperature parameters, system parameters



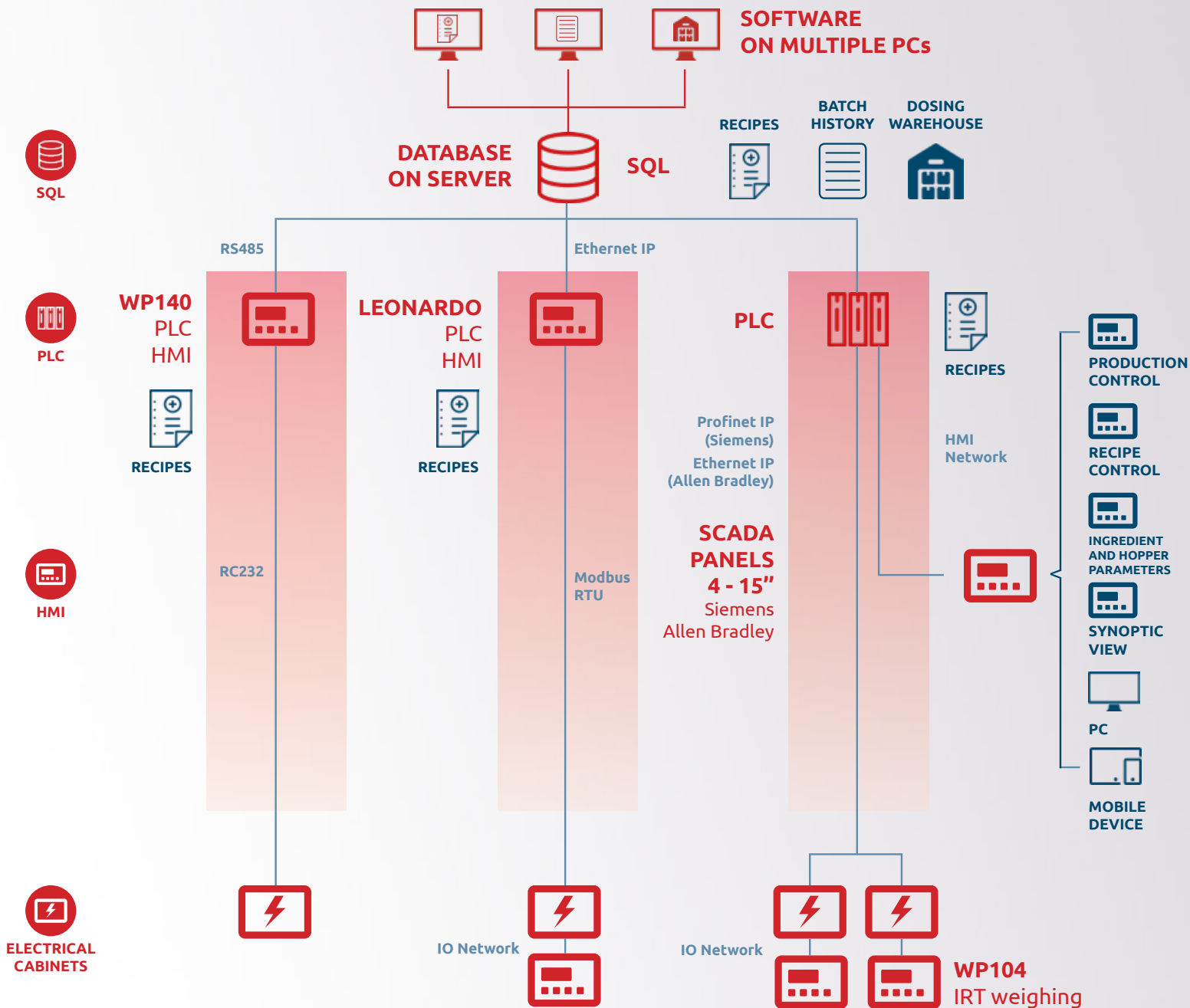
Synoptic overview



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



Architecture of the automation system





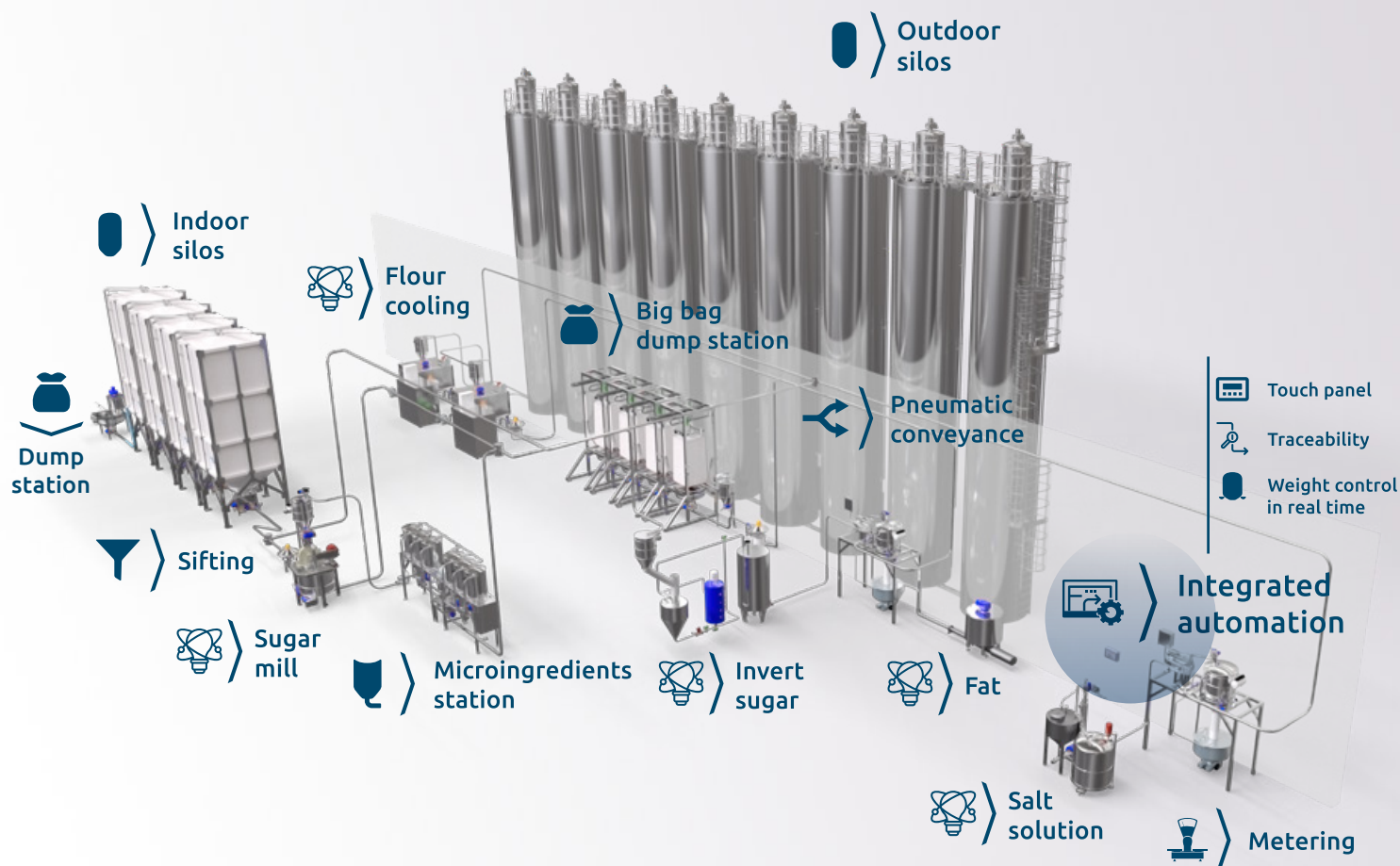
Touch panel managing
fermentation line



Touch panel managing
continuous microingredient
dosing



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



Bulk-handling systems for the food industry since 1985



STORING



CONVEYING



DOSING



AUTOMATION

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



Bakery & biscuits
Confectionery
Pasta & Cereals
Dairy
Premix

Functional food
Baby food
Pet food
Chemical
Pharmaceutical