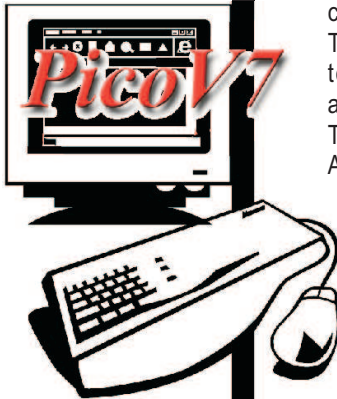


PicoV7 RR

concreting sector

Touch screen + PLC automation system for drag line plants

INTRODUCTION TO THE SYSTEM



The TOUCH SCREEN+PLC system is designed to meet the needs of CONCRETE batching plants, drag line type.

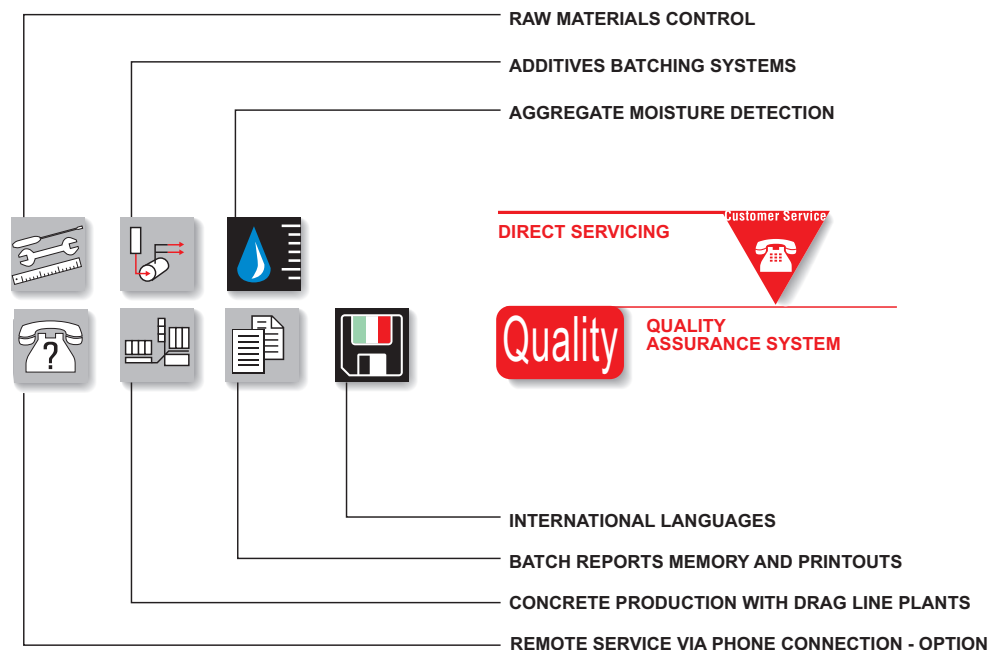
Extremely compact, it is based on STANDARD technologies that are easy to service and operate, and it features a complete automation system with powerful and comprehensive characteristics.

The wide graphic LCD DISPLAY make it easy to input all the parameters through the touch screen keyboard and ensure the readout of weights during both automatic and manual operation.

The standard version can control: 2+2 weight-batched AGGREGATES, 1+1 weight-batched CEMENTS, 1 volume-batched WATER, 3 additives batched by volume through the LVM system or by weight through the LPM system or on a single weigher, and it can control up to 4 AGGREGATE MOISTURE VALUES detected by probes or input manually.

The version for **precast production** can control: 6 weight-batched AGGREGATES, 3 weight-batched CEMENTS 1 volume-batched WATER, 2 additives batched by volume or weight, 1 AGGREGATE MOISTURE VALUES detected by probe or input manually, and a MIXER. An RS232 serial port can be used for standard 40-column printers in order to print mix reports or service printouts.

The construction features of the TOUCH SCREEN (IP65, PANEL mounting) allows installation in dusty environments such as concrete batching plants.



TECHNICAL FEATURES

TERMINAL:

Touch screen display 5,7" STN monochrome LCD.

Quick function access KEYS.

USB port for flash memory (batch reports storage)

PLC connection RS232 serial port.

Printer connection RS232 serial port.

Power supply: 24 Vdc +/- 10 % 15 VA.

Operation temperature: 0-50 °C.

Protection: front IP65, back IP20.

Weight: approximately 0,7 Kg.

PLC OMRON:

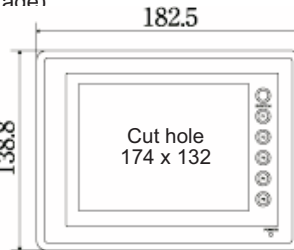
CPU module type CQM1-CPU51-E, 16 inputs 24 Vdc

Power supply module type CQM1-PA203

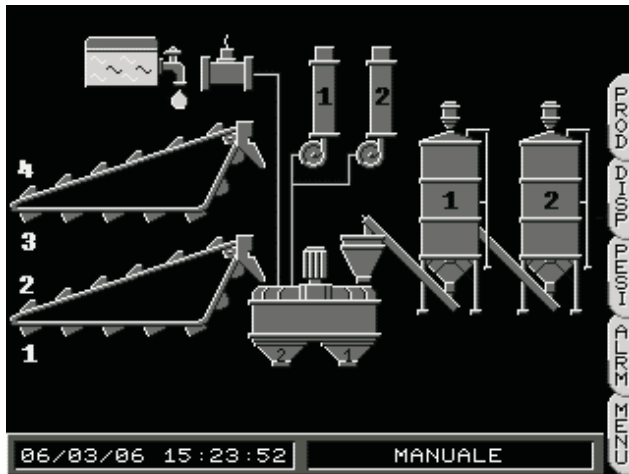
4 analogue inputs module type CQM1-AD042

16 relay outputs modules type CQM1-OC222

Serial communication cable for connection to the terminal (10 mt)



SAMPLE SCREEN SHOTS



Num. 027 Rif. A1		3 / 3	
Data	02/03/2006	Ora	14:47:26
m³	1.00		
Formula	R35S3XC042.5D20		Rok 35
Slump	S3	Classe	XC0
φ Max	20		
Comp.	m³	U%	Corr. Reale D%
0/5	kg	2000	1.0
		2020	2000
		-1.0	
42.5	kg	300.0	0.0
		300.0	303.0
		1.0	
ACQUA	1	150.0	0.0
		130.0	153.0
		17.6	
FLUID	1	1.000	0.0
		-1.00	-1.02
		2.0	
Tot. kg 2451.000 2451.00 2457.02			
A/C:	Teor. 0.500	Reale	0.571
Umidità	kg	20	
Mix (sec)	30	Scar (sec)	45

SYSTEM'S FEATURES

- It stores 200 RECIPES set in net weight for each component, on the CUBIC METER basis.
- Batching of 2 AGGREGATES by weight on a single scale.
- Batching of 1 CEMENTS by weight on a single scale.
- Batching of 1 WATER by volume (pulse launcher).
- Control of 1 AGGREGATES MOISTURE with automatic detection (or manual set).
- Control of 1 MIXER with timers and alarms.
- ALARM display and signalling during automatic production.
- All CONFIGURATION PARAMETERS of the plant can be input and trimmed to fit the physical characteristic of the plant in order to achieve the best production rate/accuracy. Free fall control, scales tare, self-tare, emptying times, vibration/fluidification, dosage slow-down, mixing time, cycle suspension and restart.
- AGGREGATES MOISTURE COMPENSATION automatic (with sensors) or manual (input set by touch screen), that modifies aggregates and water batching quantities.
- COMPONENTS DISCHARGE SEQUENCE can be programmed to trim the proper timing, for best mixing results.
- AUTOMATIC split of the requested quantity in sequential fractions, in order to match the plant's capacity (mixer, scales).
- Real time CONTROL of all production phases for production output and raw material consumption optimization.
- BATCH REPORTS storage on removable USB flash memory (5 years of production on average) in order to display, print, export them at any time.
- Automatic printing of BATCH REPORTS at the end of each production cycle and/or at the end of the truckmixer load.
- RAW MATERIAL CONSUMPTION counter, can be displayed and printed at any time.
- All configuration data can be printed for reference and service.
- ANALOGUE INPUTS (scales) CALIBRATION from touch screen.
- PASSWORD protection for access to main functions only from authorized operators.
- The system can be extensively CUSTOMIZED to match different types of batching plants (modifications are separately evaluated and quoted).

OPTIONAL

- Batching of 4 AGGREGATES by weight directly into the mixer (weighing mixer).
- Batching of 2 CEMENTS by weight on a single scale.
- Batching of 2 ADDITIVES by volume or by weight.
- Remote service (via phone line).

