

electric control boards for concrete-mixing plants

INTRODUCTION TO THE SYSTEM

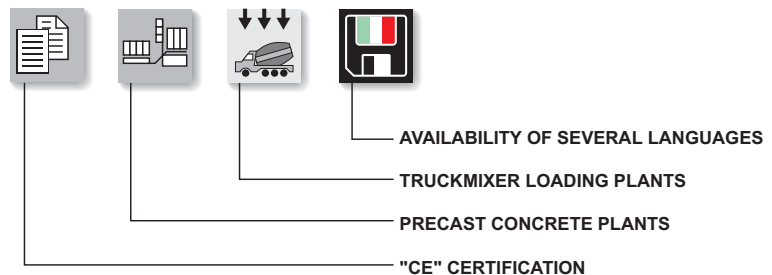
Specially studied to control plants for the production of CONCRETE and derived from years of experience in the industry.

Manufactured with a metal frame plus instrument shelves and specifically studied to control all plant's motors, valves and mechanical parts, by manual or automatic operation.

The manual functions are carried out using push button commands and optical signals located on a synoptic (mimic) panel designed with customized graphic and colours. The automatic functions are carried out through and integrated PLC system, part of Genyx automation unit, rigorously uncoupled from the manual functions to avoid harmful interference and providing extra security operational functions.

The weighing, moisture control, mixture consistency control, supply voltage control instruments, etc. are located on the panel in order to provide the operator with an optimal visual angle.

Particular care is dedicated for regulations and norm compliance, both to construction and safety, for which expertise and specific equipment are necessary. The ISO 9001:2000 Company certification guarantees the product quality even more.



TECHNICAL FEATURES



Constructional characteristics: Control board with IP55 protection, obtained using special seals. Control board size envisioned for 10% of the space available for future upgrades.

Box painted with oven-dried epoxy resin powders (RAL 7032). Access to the equipment through doors with special locks and keys. Power line protected by a live main isolator provided with adequate fuses.

Operating manoeuvre of the isolator of lockable type, with door-block. Electric MOTORS operated by contactors with MAGNET-THERMAL protection.

Warning signs on all of the dangerous live parts and protection for accidental contacts.

Auxiliary contacts manufactured using safety and isolating transformers.

Safety devices such as: mushroom-type buttons, ropes for protection from the conveyor belts etc. which cause the contemporaneous interruption of all power and auxiliary circuits.

Acoustic protection signals to warn of the start-up of the conveyor belts. Manual commands rendered inoperative and interlocked to not interfere with the automatic cycle sequence.

The interruption and return of power prevents the automatic start-up of a cycle that is authorised only by the operator to avoid harm to personnel or the machine. Materials used comply with European regulations (EC) and are selected from the best brandnames. All functions that can be carried out manually have been designed to prevent harmful interaction to machine or the personnel using it. It is however a good safety practise that all personnel assigned to the installation, maintenance and operation of the plant are properly instructed.

The plant command buttons are grouped together in separate sections for similarity and functioning logic (e.g. dosage, discharges, mixers etc).

Extra room is foreseen for future expansions and features.