

## PROGRAMMABLE AUTOMATIC PLANETARY MIXER

Ref. 111-100007/1

**Standards:** EN 196-1, EN 459-2, EN 1744-1, EN 1015-11, EN 13454-2, ASTM C 109, ASTM C 305, BS 3892-1, BS 4551-1

To perform automatic mechanical mixing sequences in mortars and cement pastes, according to the methods of the EN 196-1, EN 196-3 y ASTM C 305 testing standards.

### New programmable AP electronic control module.

Located in the front of the machine. Very intuitive and easy to use. The AP electronic control module has an alphanumeric keyboard and a backlit LCD screen for easy reading and programming.

The mixer displays on-screen messages and warning beeps to inform and guide the user about:

- › Selected standard test and current step of the mixing cycle.
- › Current speed (slow/fast).
- › Remaining cycle time, and cleaning time, pauses, etc.
- › Detected alarms.
- › Operating instructions.

In addition to the 4 preset mixing programs, includes up to 5 free-programmable mixing cycles, which allows the user to configure other cycles according to his own needs, as per not covered procedures, changes in the testing standards or for researching purposes.

If necessary, this AP electronic control module can be replaced by the user without aid of the IBERTEST Service of Technical Assistance, and without making any adjustments in the machine.

### Features

The **electric motor** is equipped with a frequency variator that maintains and ensures the speeds of the paddle, without being affected by eventual changes of mains voltage or mains frequency.

**Electrical speed change**, without mechanical drives. Free of mechanical failures = zero maintenance costs.

**Sand feeder**, automatically ruled by the AP electronic control module.

The studied design of the feeder ensures the discharge of the sand at a regular rate in the time specified by the testing standard (30 seconds). The AP control module opens the feeder only at the right moment and keeps it open during the scheduled time.

**Bowl** of about 5 litres capacity, entirely made of stainless steel, with two handles. The bowl is securely fixed on its support with a simple half-a-turn movement.

The support of the bowl has a easy leveling system that allows the user to adjust finely the gap between the bowl and the edge of the paddle.

The **mixing paddle** it's made in stainless steel, with shape, size and tolerances according to the standards. The fastening system is bayonet type, for quick and easy disassembling for cleaning.



111-100007/1



Automatic sand feeder



AP electronic control module

### Safety

Very sturdy **aluminium-cast body**, which provides a smooth operation and optimal stability, avoiding noise and vibrations.

High resistance **protection screen** against projections, made of transparent polycarbonate. It allows a clean and comfortable operation, while protecting the user from entrapments or strikes of the mixing paddle when operating.

In case of accidental open of the safety screen, an electrical micro-switch immediately switches the mixer off and stops the operations while the security screen is open.

**Specifications - Automatic programable planetary mixer**

Reference	111-100007/1
Paddle movements	Paddle revolving about its own axis and driven in a planetary movement around the axis of the bowl, in opposite directions.
Paddle revolving speed	Low speed: 140 ± 5 min <sup>-1</sup> High speed: 285 ± 10 min <sup>-1</sup>
Paddle planetary movement speed	Low speed: 62 ± 5 min <sup>-1</sup> High speed: 125 ± 10 min <sup>-1</sup>
Sand feeder	Automatic open and close. Ruled by the AP electronic controller.
Gap between paddle and bowl	3 ± 1 mm (Adjustable by the user)
Preset mixing methods	For cement mortar according to EN 196-1 For cement mortar according to ASTM C 305 For pure cement paste according to EN 196-3 For pure cement paste according to ASTM C 305
Mixing cycles for free programming	Up to 5 freely configurable mixing programs
Available programming mixing steps.	<ol style="list-style-type: none"> <li>1. Low speed, during a specified time.</li> <li>2. Low speed + spill of the sand, with acoustic warning during the spill process.</li> <li>3. High speed, during a specified time.</li> <li>4. Cleaning time with countdown timer. The mixing stops and then the safety screen can be opened for the cleaning of the bowl. Acoustic beeps warning of close end of the selected cleaning time, so that the user can close the safety screen and continues the next step of the mixing cycle.</li> <li>5. Pause time.</li> <li>6. Unlimited stand-by time. During the "stand-by" time, the display indicates: "press ENTER KEY to continue"</li> <li>7. Technical loop (usually used for checks and adjustments of the Technical Service).</li> </ol> <p>When finished a complete cycle, the technical loop links to a new one. The technical loop will repeat continuous cycles until the users press any key.</p>
Power supply	Single phase 230 V + G ~ 50 Hz
Power consumption	500 W
Dimensions	Width x length x height : 430 x 570 x 560 (h) mm
Net weight (not packaged)	62 kg

*Spare parts and accessories*

**STAINLESS STEEL BOWL**

According to EN 196-1. Ref. 111-100010

According to ASTM C 305. Ref.111-100011

**STAINLESS STEEL PADDLE**

According to EN 196-1. Ref. 111-100008

According to ASTM C 305. Ref. 111-100009

**RUBBER SPATULA**

Ref. 210-100991

**SET OF TOLERANCE GAUGES**

Ref. 111-100271

**PORTABLE DIGITAL TACHOMETER. MOD. HIBOK-24**

Ref 210-101103

*Options*

**AUTOMATIC WATER FEEDER AND DUST EXTRACTION SYSTEM DEVICES.**

*Please refer to our Sales Dept.*



210-1001103



Water feeding device