

AUTOMATIC HORIZONTAL JOLTING APPARATUS (JOLTING TABLE)

Standard EN 196-1. Reference apparatus.

Ref. 111-100017/1

For compacting of the fresh cement mortar in the 40 x 40.1 x 160 mm three gang moulds.

This apparatus comprises a rectangular table (jolting table) with 2 quick-action articulated clamps, for attachment the mould and the feeding hopper to upper surface of the jolting table.

The table has a plane machined upper surface and is connected to a rotating pivot by 2 light arms. The distance between the shaft and the center of the table is 800 mm. The pivot has ball type bearings, the bearings are protected against humidity and dust.

The table incorporates a round-headed projecting lug at the centre of its lower face. In the rest position, the lug rests on a stop anvil with plane upper surface, and the jolting table remains horizontal.

The combined mass of the table, including arms, empty mould, hopper and clamps is 20 kg.

When the compactor is in operation, the entire table, mould, hopper and clamping system is lifted by a rotating cam and then drops freely from a height of $(15,0 \pm 0,3)$ mm.

The cam is driven by an electric motor, with a reduction gear, which gives it a uniform speed of 1 revolution per second, obtaining a cadence of 60 strokes per minute, in accordance with the test standard.

AP Electronic control module

The equipment is completed with a digital electronic module, with automatic counter and display of the number of strokes per minute. It includes an alphanumeric keypad with function keys and an emergency stop button.

The module comprises an alphanumeric keyboard with function keys, an emergency stop pushbutton and a LCD digital display showing the number of jolts.

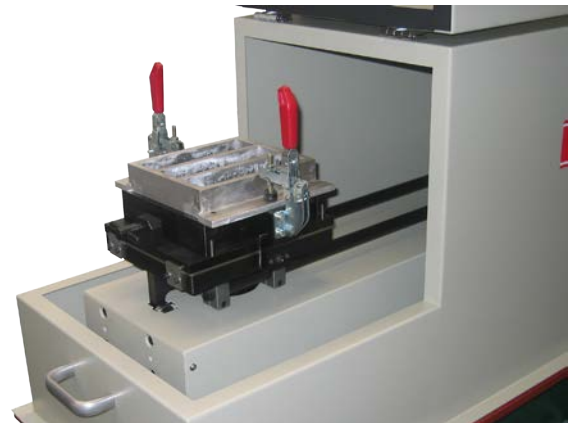
It is factory set at 60 strokes per minute, although the user can select a different stroke rate via the keypad, to adapt this equipment to any other world standard and/or research tests that involve a change in the number of strokes per minute.

The AP electronic control module comprises a magnetic fastening system, so it can be fixed to the jolting machine's metal frame or to the sound proof cabinet. Also, if desired, it can also be fixed to the concrete block by means of concrete fasteners.

If necessary, this AP new control module can be replaced by the user without the need of Technical Services IBERTEST aid, and without adjustments on the machine.



111-100017/1



Opened sound-proof cabinet showing the attachment of hopper and mould to the jolting table



Accessories for horizontal jolting table

BIPARTITE SOUND PROOF CABINET

Ref. 111-100018

To decrease noise under 80 dB, according to health and safety regulations.

The part situated over the compactation table is foldable, for an easy assembly and disassembly of the hopper-mould set. It has a gas damper, situated in the lateral of the cabinet to ease opening and prevention damage in case of accidental drop. It also incorporates an electrical lock that prevents the operation when the cabinet is open.

ELASTIC PAD (RUBBER SHEET)

Ref. 111-101150

To be placed under the concrete block. Its provides a suitable isolation that prevents external vibrations from affecting compaction. According to EN 196-1.



Specifications - AUTOMATIC HORIZONTAL JOLTING TABLE

Reference	111-100017/1
Drop height	15,0 ± 0,3 mm
Jolting rate	Preset at 60 jolts per minute. Modifiable by the user.
Combined total mass: arms + table + empty mould + hopper + clamps	(20 ± 0,5) kg. The fulfillment of this requirement is guaranteed when using only original IBERTEST three-gang moulds.)
Distance between pivot and the centre of the table	800 mm
Vickers hardness value of cam	Higher than HV 450 (optional hardness certificate available on request)
Vickers hardness value for stop anvil and lug	Higher than HV 500 (optional hardness certificate available on request)
Curvature of the lug	0.01 mm ⁻¹ (optional metrology certificate available on request)
Noise level	Lower than 80 dB (with sound-proof cabinet mounted and closed) according to health and safety regulations.
Electrical connection	1.5 m cable with host protection
Electrical requirements	Single phase 230 V + G ~ 50 Hz
Power consumption	250 W
Dimensions (width x length x height)	1000 x 400 x 500 (h) mm (jolting apparatus) 1100 x 410 x 520 (h) mm (sound-proof cabinet)
Weight	50 kg (jolting apparatus) 45 kg (sound-proof cabinet)

NOTES: The jolting apparatus, as specified by the standard EN 196-1, must be firmly fixed on a concrete block. The concrete block must be built by the user according to instructions given by the IBERTEST Technical Department.

For isolating the concrete block from the laboratory floor, the base of the block must rest on a rubber sheet of 10 mm thickness (minimum) and hardness (50 ± 5) DIDC (international grade for hardness of rubbers). The rubber sheet is also available as accessory, on demand (ref. 111-101150).

The base of the apparatus comprises 4 tie-plates for leveling and anchoring the jolting apparatus to the concrete block by means of 4 leveling screws and 4 anchor bolts. The assembly must be completed by applying a thin layer of fresh self-compacting mortar between the base of the apparatus and the concrete block, ensuring a complete contact between both surfaces.