Standard EN 196-1. Reference apparatus.

AUTOMATIC HORIZONTAL JOLTING APPARATUS
(JOLTING TABLE)
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 grit 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 operation, the jolting table is raised by a cam, and then allowed to drops freely from a height of 150 mm before the lug strikes the stop anvil.

The cam is driven by an electric motor through a reduction gear at a uniform speed of one revolution per second.

AP Electronic control module

The equipment is completed by a digital electronic control module which ensures the number of jolts in every period of jolting.

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

The speed is preselected at 60 jolts per minute, but the user can set a different frequency of drops according to his own needs, as test not covered by standards or for researching purposes.

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.

Accessories

SOUND PROOF CABINET
Ref. 111-100018

To decrease noise under 80 dB, according to health and safety regulations. 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.
### COMPACTING BY VIBRATION

**Standard EN 196-1. Alternative compaction procedure.**

### VIBRATING TABLE FOR THREE GANG MOULDS

**Ref. 210-103460**

Stainless steel model with control panel mounted on support.

**Features**

- Control panel with digital timer and vibration amplitude selection: 0.4 – 1.0 mm.
- Usable table dimensions: 400 x 300 mm.
- Universal fastening system for clamping one 40 x 40.1 x 160 mm three-gang mould, with dimensions up to 220 mm wide and 100 mm height, including mould and hopper.
- Dimensions (width x length x height): 800 x 530 x 850 (h) mm
- Power supply: Single-phase 230 V + G ~ 50 Hz

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### Specifications - AUTOMATIC HORIZONTAL JOLTING TABLE

<table>
<thead>
<tr>
<th>Specification</th>
<th>Specification Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>111-100017/1</td>
</tr>
<tr>
<td>Jolting rate</td>
<td>15.0 mm</td>
</tr>
<tr>
<td>Drop height</td>
<td>Preset at 60 jolts per minute. Modifiable by the user.</td>
</tr>
<tr>
<td>Combined total mass: arms + table + empty mould + hopper + clamps</td>
<td>(20 ± 0.5) kg. The fulfillment of this requirement is guaranteed when using only original IBER-TEST three-gang moulds.</td>
</tr>
<tr>
<td>Distance between pivot and the centre of the table</td>
<td>800 mm</td>
</tr>
<tr>
<td>Vickers hardness value of cam</td>
<td>Higher than HV 450 (optional hardness certificate available on request)</td>
</tr>
<tr>
<td>Vickers hardness value for stop anvil and lug</td>
<td>Higher than HV 500 (optional hardness certificate available on request)</td>
</tr>
<tr>
<td>Curvature of the lug</td>
<td>0.01 mm⁻¹ (optional metrology certificate available on request)</td>
</tr>
<tr>
<td>Noise level</td>
<td>Lower than 80 dB (with sound-proof cabinet mounted and closed)</td>
</tr>
<tr>
<td>Electrical connection</td>
<td>1.5 m cable with host protection</td>
</tr>
<tr>
<td>Electrical requirements</td>
<td>Single phase 230 V + G ~ 50 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>250 W</td>
</tr>
<tr>
<td>Dimensions (width x length x height)</td>
<td>1000 x 400 x 500 (h) mm (jolting apparatus)</td>
</tr>
<tr>
<td></td>
<td>1100 x 410 x 520 (h) mm (sound-proof cabinet)</td>
</tr>
<tr>
<td>Weight</td>
<td>50 kg (jolting apparatus)</td>
</tr>
<tr>
<td></td>
<td>45 kg (sound-proof cabinet)</td>
</tr>
</tbody>
</table>

**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.

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.

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**Preparation of specimens for strength test**

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**COMPACTING BY VIBRATION**

**Standard EN 196-1. Alternative compaction procedure.**

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**210-103460**