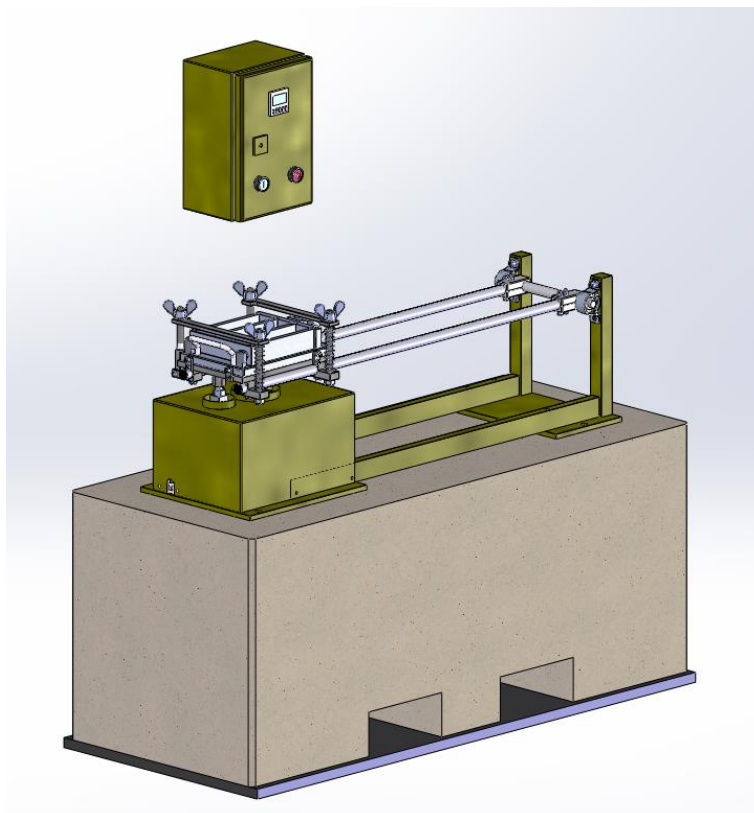


# Operating Manual

## Jolting Table

In accordance with DIN EN 196, Part 1



## Importance of this Operating Manual:

Warning: The Operator must read and understand this entire Operating Manual before putting the machine into operation.

Table of contents:	Page:
<b>1. General instructions .....</b>	<b>3</b>
1.1 Use of this equipment for the purpose for which it was intended.....	3
1.2 Use of this Jolting Table for purposes for which it was not intended .....	3
1.3 Guarantee .....	3
1.4 Description of the Jolting Table .....	4
1.4.1 Mechanical design .....	4
1.4.2 Electrical design.....	4
<b>2. Basic safety instructions.....</b>	<b>4</b>
2.1 Obligations of the User / Operator .....	4
2.2 Dangers involved in work with the Jolting Table .....	5
<b>3. Scope of delivery .....</b>	<b>5</b>
<b>4. Acceptance of delivery and transport .....</b>	<b>5</b>
4.1 Acceptance of delivery .....	5
4.2 Transport .....	6
<b>5. Technical data .....</b>	<b>6</b>
<b>6. Placing the Jolting Table into operation .....</b>	<b>7</b>
6.1 Securely mounting the Jolting Table.....	7
6.2 Steps in providing the electrical connection to the Jolting Table .....	8
6.3 Setting the number of jolts (strokes) per minute (pulses per minute).....	8
6.4 Starting the sequence of testing .....	8
6.5 Stopping the sequence of testing .....	9
6.6 Setting the motor speed .....	9
<b>7. Troubleshooting.....</b>	<b>9</b>
<b>8. After-sales service .....</b>	<b>10</b>
8.1 Version of this Operating Manual .....	10
8.2 Copyright .....	10
8.3 Address for technical support and ordering of spare parts .....	10

## Attachments:

- 1 sheet: Description for the settings on the frequency converter
- 1 sheet: European Communities' Declaration of Conformity
- 1 sheet: Electrical circuit diagrams
- 1 sheet: Record of testing and measurement

## 1. General instructions

### 1.1 Use of this equipment for the purpose for which it was intended

This Jolting Table was designed only for the purpose of compacting mortar in three-gang moulds.

The User must absolutely observe all the instructions, requirements, and limit values, as well as all safety instructions, which are included in this Operating Manual.

Any use of this Jolting Table not in conformity with these instructions, requirements, and limit values, as well as all safety instructions, shall be considered as not in accordance with the purpose for which it was intended.

If the User wishes to employ this Jolting Table in any special manner of operations, or under any special operational conditions, that deviate from these instructions, requirements, and limit values, as well as all safety instructions, it shall be necessary for the User to obtain the advice and the prior written approval from the Manufacturer.

### 1.2 Use of this Jolting Table for purposes for which it was not intended

The following shall be included among those purposes and conditions for which this Jolting Table was not intended, and shall therefore not be allowed:

- The use of moulds that are different from the originals
- The placing of objects on the support surface of the equipment that are not part of testing in accordance with the relevant standards.
- Operation of the Jolting Table in extremely damp or wet environments.

### 1.3 Guarantee

The basis for stipulations made in the following is our **General Terms of Sale and Delivery** (*Allgemeine Verkaufs- und Lieferbedingungen*).

The Manufacturer guarantees that this Operating Manual was prepared in conformity with the technical and functional parameters of the Jolting Table as delivered. The Manufacturer reserves the right to add supplementary information to this Operating Manual.

The Manufacturer hereby provides the legally stipulated guarantee. This guarantee does not cover wear parts.

The Manufacturer guarantees trouble-free operation of this device only if the User properly follows the instructions in this Operating Manual, and only if the User employs this device in accordance with its intended purpose.

The Manufacturer may not be held liable for any damages which arise from employment of this Jolting Table that is not in accordance with its intended purpose, or which arise from the User's failure to follow the instructions and stipulations contained in this Operating Manual.

The Manufacturer shall not be obligated to satisfy any claims under this guarantee in the event that the User makes any modifications to the Jolting Table, or if the User modifies the Jolting Table with respect to its functional state, without the express, prior, and written consent of the Manufacturer.

## **1.4 Description of the Jolting Table**

### **1.4.1 Mechanical design**

The Jolting Table is constructed of semi-finished steel products. All components are zinc-plated, or have a protective paint finish.

The control box is intended for installation onto a wall, or for mounting on a suitable frame.

### **1.4.2 Electrical design**

A 3-phase AC motor powers the eccentric disk that provides the jolting action. The Operator can use the external control unit to set the number of jolts: see instructions in Section 6.3. The control box contains a frequency converter that enables the Operator to adjust the motor speed in accordance with the relative standards: see the instructions given in Section 6.6.

## **2. Basic safety instructions**

### **2.1 Obligations of the User / Operator**

A person may be allowed to operate the Jolting Table on a non-supervised basis only if he/she:

- Has reached the age of 18, and
- Has been sufficiently instructed in the proper operation of the Jolting Table, and
- Has been given a written order by the Operator / Owner to operate the Jolting Table.

The person operating the Jolting Table shall ensure that he/she endangers neither himself/herself nor any other persons by its operation.

**If the Jolting Table suffers any deficiency or damage that might impair its operational safety, then the equipment must immediately be removed from service. It may be placed back into operation only after all sources of such danger or impairment have been eliminated.**

## **2.2 Dangers involved in work with the Jolting Table**

This Jolting Table has been designed and built according to the state of the engineering art and in accordance with all recognized technical regulations and standards. Nevertheless, it is possible during its operation that danger to life and limb of its User / Operator, or to third parties, could arise, and that damage could occur to the mechanical components of the equipment or to other objects of value in the vicinity.

The Jolting Table may be used only:

- For the purpose for which it was intended
- In perfectly satisfactory condition with respect to its technical safety aspects.

Any faults, malfunctions, or defects in this device that may impair its safety must be immediately corrected.

## **3. Scope of delivery**

The scope of delivery includes the following:

- Jolting Table (ready for operation)
- External control unit
- Power cable with an all-rubber, two-pole-and-earthing-pin power plug (industrial earthed power supply).

Optional:

Concrete block

Noise insulation hood

## **4. Acceptance of delivery and transport**

### **4.1 Acceptance of delivery**

When accepting delivery of the Jolting Table, first inspect it for its outer, visible condition. If this inspection is satisfactory, the shipment may be accepted from the freight forwarder (courier service or other haulage company).

If there are no shortcomings, and if there are no transport damages, then use the bill of delivery to make sure that the consignment is complete, and that all parts have been delivered.

If you assume or suspect transport damage, or if transport damage becomes apparent only after you have accepted the delivery, immediately make an exact report of the conditions

and any damage as they exist. Send us this report immediately by fax. Important: Absolutely do not make any changes to the delivered goods.

After we have studied your report, we can make a decision whether we can:

- Deliver spare parts to you, or
- Send a specialized fitter/installer to your plant, or
- Ask that you return the system to us for repair.

## 4.2 Transport

The Jolting Table is delivered standing on a pallet. The hollow spaces in the outside packing are filled with filling material, in order to prevent transport damages.

You can move the Jolting Table to its place of installation by leaving it in its packing and by moving it with a fork-lift truck or with other suitable transport equipment that can reach under the pallet. It is necessary for this transport equipment to reach under the pallet to move the Jolting Table to its intended location.

Do not use cables or ropes wrapped around the equipment, or any similar lifting apparatus, to lift the system – unless you can assure that lateral forces will not act on the packing or on any parts of the system while it is being lifted.

It is also possible to move the pallet by hand to the place of equipment installation.

The weight of the equipment is approx. 40 kg.

## 5. Technical data

Dimensions	1020 × 300 × 400 mm
Weight (mass)	approx. 40 kg
Class of enclosure protection	IP 20
Supply voltage	230 V
Power frequency	50 Hz
Current input	0,5 A
Power input	120 W
Motor speed	60 rpm

## 6. Placing the Jolting Table into operation

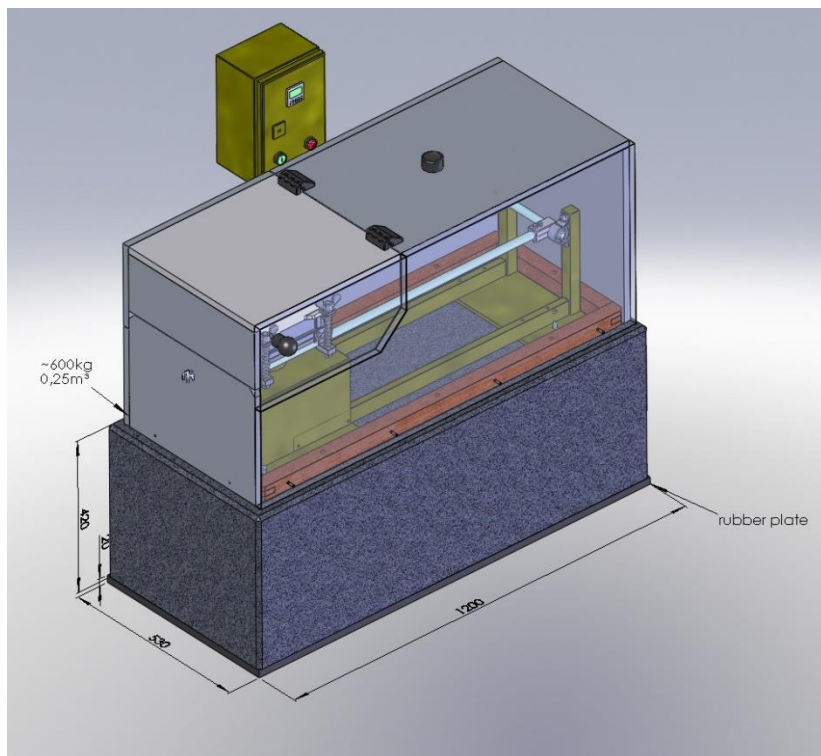
### 6.1 Securely mounting the Jolting Table

The Jolting Table must be securely mounted in accordance with DIN EN 196, Part 1.

The Jolting Table must be rigidly and securely mounted to a concrete block approx. 600 kg in weight (mass). This means a concrete block approx. 0.25 cubic metres in size. The dimensions of this concrete block must be such that they provide a suitable working height at the Jolting Table.

The entire base of this concrete block must be mounted on an elastic layer: for example, natural rubber. The insulation properties of this rubber base must be such that they are sufficient to insulate the Jolting Table from any vibrations from the outside that might influence the compaction process.

The base plates of the Jolting Table must be securely mounted to the concrete block by anchor bolts. The base plate must after attachment be horizontally level. A thin layer of mortar must be provided between these base plates and the concrete block so as to ensure complete and vibration-free attachment of the equipment to the concrete block.






## 6.2 Steps in providing the electrical connection to the Jolting Table

Follow the steps below to provide the electrical connection to the Jolting Table:

- Plug in the all-rubber, two-pole-and-earthing-pin power plug to a suitable power socket.
- Set the main switch of the Jolting Table to “I”.

<p>Caution</p> 	<p>We highly recommend the use of a residual-current-operated circuit-breaker (RCCB; also known as earth-leakage circuit-breaker, ELCB), with a fault-current tripping rating of 30 mA.</p>
--	---

German accident-prevention regulations (DGUV) require that the users of transportable electrical devices test such devices in a testing cycle approx. every six (6) months, in accordance with VDE 0701, Items 1 to 4.

## 6.3 Setting the number of jolts (strokes) per minute (pulses per minute)

1. Connect the Jolting Table to the electric power supply: 230 V / 50 Hz, by plugging in the all-rubber, two-pole-and-earthing-pin power plug to a suitable power socket. Set the main switch of the Jolting Table to “I”.
2. Press the button marked “Lock”. This will unlock the counter.
3. Set the number of desired jolts (pulses) per minute by pressing button ▲ or ▼
4. Press the button “Lock” to lock the counter.



## 6.4 Starting the sequence of testing

Connect the Jolting Table to the electric power supply

Set the main switch to the position “I”. The display will show two numbers: on the upper area is the actual display, and the required display is at the bottom. The upper (actual) display shows the number of jolts actually performed, and the lower display shows the number of jolts yet to be performed. Press the “Start” button to start the slump testing.

When the Jolting Table has executed the number of jolts that had been set, the motor will switch off, and the meter display will jump back to zero. As default, the counter is set at the manufacturer’s plant to stop the test after 60 jolts.




## 6.5 Stopping the sequence of testing

You can stop or interrupt the Jolting Table at any time by pressing the “Stop” button. If you press this button, the top part of the display will show the number of jolts that have been performed until the “Stop” button was pressed.

If you press “Stop” and then press the “Start” button again, the Jolting Table will continue the process at the number of jolts that had been registered until the Jolting Table was stopped.

If you press the “Lock” button, this will unlock the counter. You can then set the counter back to zero by pressing the “Reset” button. To lock the counter again, press the “Lock” button. You can now start another test.

## 6.6 Setting the motor speed


<p>Danger</p> 	<p>Setting the motor speed takes place under mains voltage (230V). Only a properly trained electrician may be allowed to set the motor speed.</p>
--	---

If you have determined that the number of jolts per time unit (e.g., per second) is not in accordance with the specifications, then you can adjust the frequency converter to set the number of jolts per time unit. If the number of jolts per time unit is less than required, increase the frequency. If the number of jolts per time unit is more than required, decrease the frequency.

To adjust the frequency converter, open the control box and make the settings as described in the appendix at the end of these instructions.

Then start the Jolting Table and check its proper functioning. After making the setting and checking the number of jolts per time unit, close the control box.

## 7. Troubleshooting

<p>Danger</p> 	<p>Do not allow anyone but a properly trained electrician to work on the electrical system of this Jolting Table or any other electrical equipment.</p>
---	---

In case of malfunctions of the Jolting Table, first disconnect it from the electrical power supply.

For any further troubleshooting, please consult our detailed manual and the enclosed electrical circuit diagram.

## 8. After-sales service

Great care has been taken to ensure that this Operating Manual is true and correct. No guarantee, however, can be provided that it is free of error and mistakes, or that the instructions and information provided herein remain true and correct in case of technical modifications.

### 8.1 Version of this Operating Manual

Version: 8  
Dated: June 2017

### 8.2 Copyright

The copyright to this Operating Manual is held by:

**TESTING** Bluhm & Feuerherdt GmbH

This Operating Manual is intended to be used only by the User / Operator and his staff. The contents of this Operating Manual may not be:

- Reproduced
- Distributed to any other persons
- Provided as any kind of information to any other persons.

Any violation of these stipulations can be punished by a court of law.

### 8.3 Address for technical support and ordering of spare parts

Please get in touch at the following address if you require support with technical questions, or if you wish to order spare parts:

**TESTING Bluhm & Feuerherdt GmbH**

Motzener Str. 26b

D – 12277 Berlin

Germany

Tel. +49 (0) 30 710 964 5-0

Fax +49 (0) 30 710 964 5-98

E-mail: [info@testing.de](mailto:info@testing.de)

[www.testing.de](http://www.testing.de)

Appendix: Description for changing the settings on the frequency converter

No.	Description	Symbol / Display
1	Use a spanner (wrench) to open the control box. Switch on the power to the Jolting Table, <b>but do not start it.</b>	For example: <b>0.0</b>
2	Press the <b>FUNC</b> button to enter the menu.	
3	Press the arrow buttons until <b>F 001</b> appears.	▲ or ▼
4	Press the <b>FUNC</b> button.	
5	The display will then show the frequency which was set <b>until now.</b>	For example: 55
6	Use the arrow buttons to change the settings.	▲ or ▼ For example: 56
7	Press the <b>STR</b> button to save the new setting	