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# **Marshall Automatic Compactor**



## **Contents**

## Chapter 1

1.1 General Information

### Chapter 2

- 2.1 Installation
- 2.2 Switching on the Machine
- 2.3 Maintenance
- 2.4 Specifications



#### **CHAPTER 1**

#### 2.1 GENERAL INFORMATION

Please read the manual carefully before use. Keep the manual in order during the use of the appliance to consult it for any needs. The Manufacturer assumes no liability for any damages caused by misuse of the machine. The manufacturer has the right to modify this technical literature as well as the machine without prior notice.

Any tampering or modifications done to the machine, (electric, mechanical etc.) will immediately void guarantee and any damages will be charged accordingly.

Wooden pedestal manufactured in compliance with SANS standards with base connections to secure the machine to the floor.

Steel base plate (compaction anvil for hammer); mould clamping system with quick couplings. Compaction Hammer of 4 540 g  $\pm$  10g raised to a height of 460 mm  $\pm$  3 mm and allowed to drop. Electric control panel with automatic blow counter for pre-setting of the required number of blows and automatic stop. The compactor is capable of applying 60 blows/min  $\pm$  10 blows/min.

Safety protection made of steel complete with relevant micro-switches.

#### **CHAPTER 2**

#### 2.1 INSTALLATION

The machine is for Laboratory use only.

- Machine can be bolted to a concrete block.
- Make sure compactor is mounted level on concrete block.
- Allow enough space on each side for easy maintenance.

We recommend that a Voltage Stabilizer should be used together with the compactor, this will ensure that the counter will not get damaged. We cannot guarantee any damages to the Control unit due to power surges.

#### 2.2 SWITCHING ON THE MACHINE

- Open the main safety guard
- Position the mould already filled with the specimen on the centring pin situated on the steel base
- Secure the mould to the base

- Lift the hammer weight and insert the hammer
- Align the catches to the pick-ups on the main drive chain
- Move the hammer so that the hammer touches the specimen surface
- Close the safety guard door.
- Push the start button

#### 2.3 MAINTENANCE

In order to maintain good working of the machine clean periodically all parts and oil the parts . Avoid the use of solvents, which could damage the parts.

- Check the weight falling height: Check if the falling height is 457.2mm, Check frequently of after every 50 working hours.
- Check the leaver arms and its springs: Ensure that the lever arms and its springs are working correctly keeping the mould centered. Check frequently or after every 50 working hours.
- Check the catch blocks on the chain: Ensure that the catch blocks keep the chain pushed towards the hammer. If necessary adjust them using the fixing screws. Check frequently of after every 50 working hours..
- Grease the chain: If necessary wash the chain with degreasing agent thoroughly and grease it.

  Grease when needed or after every 50 working hours.

#### 2.4 SPECIFICATIONS

Dimensions: +/- 400x400x1400 mm

Power: 230 V, 60 Hz, 1 ph

Weight: 80 kg