Securamat

The Reliable & Friendly Amalgamator



- Universal Mixer For Amalgam, Glass Ionomer Cements &Other Pre-dosed Materials
- Featuring Silamat Technology
- Low Noise
- Simple & Safe Operation
- Maintenance Free
- Mixing Fork With Proven Life Cycle

SILMET BJM LAB





Technical Data: Securamat

Securamat operates customized trituration-time and is ISO 9002 and ISO 13488 quality-management certified.

Features:

- Touch pad selector and digital LED display.
- Pre-programmed time settings
- Special pin for opening ultrasonically welded capsules
- Mixing fork with proven life cycle
- Sealed mix area.
- · Superb accuracy for more consistent mixing
- Elegant ergonomic design.

The apparatus has been tested according to the safety requirements for electrical equipment for measurement, control & laboratory use: ISO 7488, EN 61 010-2-51 : 1995

1. Electrical equipment	
Mixer fuse:	220-230 V / 50 Hz = 1.6A
2. Technical specifications	
Rated voltages:	110-120 V / 60 Hz 220-230 V / 50 Hz
Power:	180 Watt
Mixing frequency:	4200 rpm
Short-term operation:	Working time 1-20 s
3. Weight and dimensions	
Dimensions:	220 mm long 230 mm wide 180 mm high
Weight:	4 kg
4. Drive	Alternate current motor, Class B
E Operating conditions	

5. Operating conditions

The apparatus is suitable for use under the following conditions:

· Use only indoors

Temperature range for operation: 5-40 ?C (41 - 104 ?F)

· Temperature range for storage: 0-50 ℃ (32-122 °F)

• Maximum relative humidity 80% for temperatures up to 31 °C (87 °F),

gradually decreasing to 50% relative humidity at 40 °C (104 °F).

Voltage fluctuation of the power supply should not be more than ±10%

of the indicated voltage

· Excess voltage category II





Solutions For Amalgamator Technical Problems

Display Illumination failure

Problem

The digital LED display is not lit The instrument does not switch on

Solution

Ensure that instrument is properly plugged in. Switch on the instrument with using the switch placed on the left side.

Noisy Amalgamator

Each amalgamator has two screws on the underside to secure the engine during transport mode and these should both be removed before use. Noise emitted from the amalgamator may be due to screws still attached. There is an instruction manual enclosed in each box that illustrates this.

Capsule touches the protection cover top

Ensure that the two screws on the underside that secure the engine during transport mode are removed before use.

Fork moves slowly

This may happen if the instrument has been exposed to temperatures below 5° C

Solution

Push the + button and punch in the number 99 Push start for two cycles

Amalgam too hot

This could happen if the accurate mixing time indicated has not been used. Check the amalgam instruction table for accurate mixing time.

Cement and Glass lonomers do not mix or come out of the capsule

Ensure that the instructions indicated by the manufacturer for mixing time and speeds have been accurately followed.

Capsule falls off fork during mixing

Ensure that the capsule is correctly inserted between the two fork prongs in horizontal position.

Broken Fork

Could be a result of tampering. Replace fork. The speed and power of oscillation are shown in the instructions.





Guidelines When Triturating Any Amalgam Capsule System

Often we receive questions concerning problems with the trituration of amalgam. It is important to mix amalgam for the appropriate amount of time and speed because it can affect the alloy's working time, handling characteristics and clinical performance.

The following guideline can help you avoid inconsistency in the performance of the triturated amalgam (regardless of its type pr brand).

- Operate the amalgamator without a capsule in different speed options, if you can't notice any real change in the speed of the machine when used in different end of the speed scale button, please avoid using this machine and report to the supervisor. Most likely that you won't be able to achieve good mixing results with this machine.
- Tap the capsule base against the counter twice to make sure that the material is free to float before trituration .
- Pay careful attention that the capsule is properly inserted in the amalgamator fork. If the capsule is not 100% horizontal to the machine, the efficiency of the mix can be dramatically be effected
- If during operation the machine is making very loud noise or seems to change speed during operation, report to supervisor. There is usually a screw at the bottom of the machine to secure the amalgamator engine during transportation. Many times people forget to take this screw away before operation, which will result in very poor and noisy operation.
- If you open the capsule and no material come out, please tap both base and cap of capsule against a counter, the mixed mass can be adhered to the inner walls of the capsule.

If this occur please reduce speed of trituration or time, the material was exposed to extra trituration.

- Feel the mixed material if it is hot or seem dry, reduce speed or time
- A good mix is when the material comes out from the capsule as a rounded ball and the surface look shiny. if you have problem getting good results please call our technical department (+972-3-7353000)

Determining Mixing Times for Amalgam

Method you can use to quickly and accurately determine the appropriate mixing time for your amalgam. One way of doing this is to follow the steps listed below:

- Set the triturator's mixing time for 6 seconds Make a mix and examine the amalgam for plasticity.
- If the amalgam is too dry and does not hold together, increase the mixing time by one-second increments, each time making a test mix and examining its plasticity.
- When the first acceptable plastic mix is produced, increase the setting by two seconds and use that as the appropriate mixing time for that particular amalgam.
- Further adjustments of the mixing time may be necessary; however this gives you one way of determining a mixing time using an organized approach.