



## **Vibration – Flat –Lapping – Machine Vi-45 (and Vi30)**

This machine (57db) is suitable for automatic horizontal grinding and polishing of stone surfaces. They are designed for continuous operation and can run day and night. They are characterized by low power consumption of 90w (220V AC). After opening the package and removing the machine, please take a quick look for any transport damage. Find a place for the machine where it can stand horizontally. Remove adhesive tape and packaging material. Please read the instructions and warnings carefully.

### **BEFORE commissioning:**

For better transport, machine parts were enclosed loosely, which you now simply have to attach again according to instructions: Remove any adhesive tapes attached to the upper triangular plate on the lower triangular base. By slightly lifting one corner of the upper triangle, place one of the three enclosed balls in the horizontal ring provided for this purpose. Do the same with the other two balls.

Now screw wing screws into the three upright angles/corner edges of the plate, with which the silver tub can now be screwed centrally: Screw on the tub, then place one hand in the middle of the tub and push the tub down. (Otherwise, the tub can "climb up" when tightening the screws.) Now with the other hand, around and around, turn the screws a little further until they are stuck. Make sure that the tub remains centered/centered or in the middle!

### **Instructions:**

1. Before you simply place the stones to be processed with the surfaces, please note the following: The stone side you want to grind must be completely flat. Unevenness may have to be ground away beforehand (e.g. the part still attached after cutting (also called "nose")... on a fine grinding wheel).

2. If necessary, give a shock protection around the stones, e.g. from a water hose (available from us; simply bend around the stone slabs, put ends together) or from plastic discs or other materials.

3. If the stone surfaces are still very coarse or uneven, use our abrasive powder of grain size 80. But if the surfaces are already quite smooth and flat, you can start with grain size 220 or finer. Sprinkle a few tablespoons full of abrasive powder into the tub (try about 2 tbsps) and add some water (try a water level up to the top of the bumper ring (hose) when the stones are already in the tub). Pour in enough water to form a thin grinding sludge. Better to give a little less water first, because when filling you can still, hardly take away. Then insert the stones with their impact protection. Usually: soft stones water height to hose height. Hard stones Water height to the middle of the hose.

4. If thin and thick slices are placed at the same time, you would do well to weigh down the thinner ones so that they have enough pressure on the tub and can cope with the thicker, heavier plates at the same time.

5. To avoid water evaporation and annoying attention (whether you have to add a little water again), you can cover the sanding tub with a (preferably transparent) film. Don't hang loose! For objects to be sanded, which do not reach beyond the edge of the tub in their height, a stretched, flat lying foil which you attach to the side of the tub outer edge with adhesive tape / glue airtight. For objects that are higher than the edge of the tub, get a clear-sighted large plastic bag, the opening of which can surround the tub (and be attached there airtight, with adhesive tape, to the outer edge of the tub). The bottom of the bag must be held up with a twine from the ceiling. Or attach a wire, e.g. from a bent wire hanger, laterally to the lower machine housing and lead it upwards in an arc to over the sanding tank and tie the bottom of the bag to it.

6. TURN ON the machine at side-mounted switches and let it run for a few hours (also possible overnight if necessary). Initially, it is best to make sure every two hours that everything is running properly: the grinding sludge must look right (i.e. only a thin layer of grinding sludge) and the stones / or other objects must move diligently on the tub.

If you run the device at night, which is easily possible, please check again in the evening whether there is still a thin grinding sludge (1-2 mm high). If necessary, add a little water and then cover well again to prevent too much water evaporation and thus also to avoid that you find the tub with the stone slabs in solid mud crust the next morning.

7. If you do not notice any further improvement in the grinding points, it is time to change the powder type and take a finer one. Before this change, however, you must very carefully protect the tub, stones, possibly weights, shock protection, hands... Wash (very carefully). No powder grain from the previous variety must remain!  
After grain 220, take grain 400. Use the powder for up to a day and a half. If, after some time, there is no improvement in grain 400, switch again. Now take grit 800 up to a day or two, or equal to polishing powder. Use our well-known "X-3" as polishing powder (look for the registered trademark "X-3").

8. For polishing it is recommended to use an extra tub, which is always used only for polishing. A polishing insert should be attached to the polishing tub, which is attached to the inner bottom of the tub by means of the specially designed pressure-sensitive adhesive. Always mix the polishing powder in such a way that a thin polishing sludge forms on the polishing insert.

You can brush / spread this on the polishing insert until it is completely covered with it. Until the polishing insert is saturated, you will have to gradually brush it even further.  
If in doubt, let the vibrator run a little longer than too short with the same powder. Grind wet, polish damp. Never work dry, always work with water!

Always wash and clean everything thoroughly between each powder change!

**Usage ideas:** For your small or large stone slabs. For example, as decorative plates on stands or translucent panels for hanging in front of windows. Make a mobile with several small plates. As watch plates, for the design of lamps or for lead glazing (use translucent plates). As a jewelry pendant. For occupying fireplace walls, for a door framing or as a door handle (cut thick enough), doorbell plate, coasters for glasses and bottles...

**Tip:** If you want to make the time-consuming tub cleaning easier, get an extra tub. So you can grind in one and polish in the other. If the grinding tray is no longer flat inside, get a low-viscosity adhesive (which adheres to aluminum) and use it to make yourself a newly leveled floor. Once everything has dried, place your polishing mat in this new/old tub using our pressure-sensitive adhesive and use it as a polishing tub. Clean the tub that you previously used as a polishing tub well (remove pressure-sensitive adhesive residues) and now use it as a sanding tub.

The work instruction is not law, grinding is an art and so you can deviate from it depending on your experience. We wish you much joy and success in this beautiful work!

**Disposal:** The machine is durable. If the engine is defective, it is detached from the machine and replaced. Otherwise, it belongs to the disposal of electrical appliances.

**POWDER DISPOSAL:** The little bit of abrasive powder and stone abrasion that is left over (usually every 24 hours) is not worth storing for reuse (also the abrasive powder has become too fine to achieve sufficient abrasive effect). Collect the powder in e.g. an empty container. Once enough has been collected and dried, dispose of it in a local dump (household waste).

**We wish you a lot of fun and success in grinding!**  
**Your H+B- Team**

### **Warnings:**

- Read the operating instructions carefully and observe all safety instructions! Check that the information on the label matches your power supply. The machine / equipment must not be exposed to the weather or stand in a damp room and must not stand/run with flammable liquids or gases.
- Do not place the machine and cable on heat sources (e.g. stove, heater).
- Unplug the power outlet when the machine is not in use
- If the machine "wanders" select a better pitch.
- Very important: The tub must be firmly screwed for the operation and must never run loose on the machine!
- If it smells burnt, immediately turn OFF the machine and unplug it from the socket. Determine if the smell comes from this machine or if it is due to the socket. Have it checked by a specialist (electrician).
- Do not use multiple sockets.
- Do not use extension cables.
- Plug into grounded socket only.
- Only pull the plug out of the socket with dry hands or plug the plug into the socket!
- Do not pull the machine on the cable.
- Do not use the machine if the power cord or plug is damaged, the machine is not working properly, has fallen or is otherwise damaged.
- We recommend a DI personal protection adapter plug, which switches off the current in fractions of milliseconds in the event of a short circuit, for example.
- Keep the machine clean. Do not clean the machine in a water bath.
- When cleaning the pan, remove the pan.
- Never put things in the tub or take them out while the machine is running
- In the presence of children, always keep children under supervision.
- Use the machine out of the reach of pets.
- Do not run the machine in a closed cabinet/box. Don't put anything over it.
- Do not place the machine in a tub/box.
- The engine needs cooling and the upper part of the machine must be able to vibrate freely.
- Do not move or carry back and forth while running.
- Place the machine only on a straight, solid floor or table.
- In case of unknown / disturbing noises that you cannot assign: Switch off the machine and use it again only after clarification.
- Use only suitable tools and do not make do with unsuitable or sharp aids. These could cause accidents or injuries.

## Certificate of Conformity



### ***Homberg + Brusius e.K.***

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### **Vi-45**

### **Vibration-Flat lapping machine for gemstones, semi-precious-stones**

**Single phase motor, KW 0,12. 4-poles, 230V/50Hz. 50db**

2014/30/EU on the approximation of the laws of Member States relating to electromagnetic compatibility.

2014/35EU on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits.

2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment, RoHS

**The machine is herewith declared to conform with the following guidelines  
Machine guidelines 2006/42/EU**

**Kirschweiler, 2019**

**Kitty Homberg, Owner**

A handwritten signature in blue ink, appearing to read 'Kitty Homberg', written over a horizontal line.