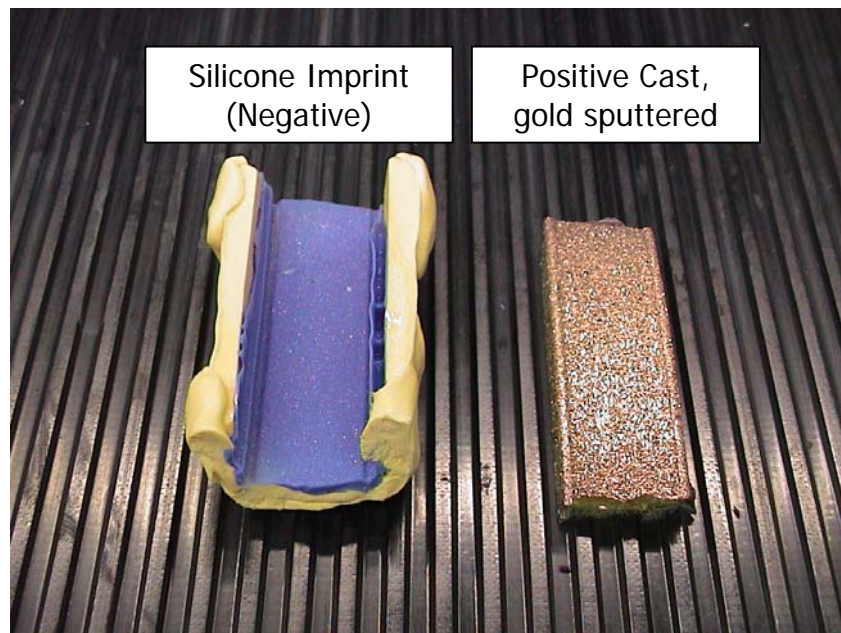


Content

1. Purpose and Scope of Application
2. Required Material
3. Making the Negative Imprint
4. Making the Positive Cast



1. Purpose and Scope of Application

This instruction describes the steps for making silicone imprints of abrasive layers. The silicone imprints allow to record the progressive wear of abrasive layers, even when the grinding wheels are installed in the machine.

2. Required Material

For making silicone impressions you need the following materials:

- Acetone
- Handbrush or paintbrush
- Pre-impression paste: Panasil putty soft (base paste white, hardener paste yellow)
- Fine impression paste: Panasil contact (violet) in cartridge with mixing tip
- Dispensing gun: Applyfix 4 (System S-50)

(Panasil and Applyfix are registered trademarks of the company Kettenbach Dental, D-35713 Eschenburg)



3. Making the Negative Imprint

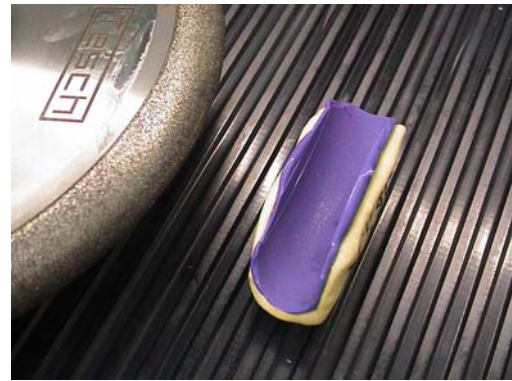
- Clean thoroughly the grinding layer and the neighbouring core with acetone using the handbrush or paintbrush.
- **Oil must be completely removed**, one drop can render the whole imprint unusable.
- When creating the imprint on a mounted wheel, **avoid dripping of coolant onto the area of the imprint** (cleaning paper or a cloth should be put around).
- Hand mix the white base paste and the yellow hardener paste in equal volumes. Avoid contamination of the base paste with hardener in the containers (take one hand for white and the other hand for yellow). Knead the pastes, until the colour is homogeneous (bright yellow).



- Press the impression material against the cleaned part of the grinding layer. Hand form the impression material around the whole profile of the grinding layer making sure that the entire impression area is covered.
- Let the preliminary imprint harden for at least **five minutes**.
- Preparing the fine impression material:
 - Insert the cartridge into the dispensing gun.
 - Remove the cartridge cap (mixing tip cover).
 - Mount a new mixing tip on the cartridge (bayonet catch).
 - Do not extrude any impression material, because it would harden inside the tip in two minutes!
- Remove the preliminary impression from the grinding wheel, fill in the fine impression material (forming rows side by side).
- Leave the mixing tip on the cartridge after use or apply the cartridge cap.
- Press the filled preliminary impression at the same place of the grinding layer as before. Bend the edges of the imprint outwards and press from the middle to the edges, until the fine impression paste squeezes out homogeneously. Let the imprint harden for at least **15 minutes** minimum.
- Label the preliminary impression with a permanent marker (e.g. edding 3000).



- Remove the imprint and check for homogeneous quality throughout the fine impression:
The violet impression paste should cover the whole imprinted area and must not have any holes in it.



4. Making the Positive Cast

- If necessary, put some preliminary impression material at the ends of the negative imprint forming a sealed impression area.
- If necessary, fit holders by means of the preliminary impression mass, so that the imprint is standing stable with the opening upwards.
- Put the imprint in a desiccator / recipient.
- Mix cast resin DIEMET-E with a given volume ratio (same number of bars on the injections) and fill it in the imprint.
- Close the desiccator / recipient and evacuate with a water jet pump for 15 minutes (or with a rotary vane pump under constant surveillance).
- Wait until the foaming of the resin, if necessary, release by tapping additional air bubbles.
- Before the resin overflows, ventilate desiccator / recipient.
- In case there are still many air bubbles visible on the ground of the imprint, once again evacuate and ventilate.
- Let the resin harden for 24 hours.
- Sputter the positive cast with gold.

