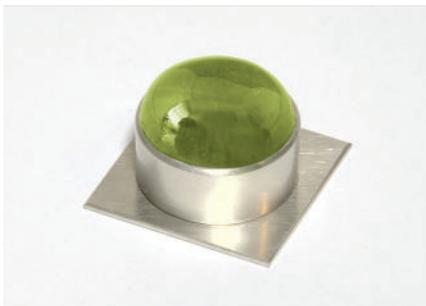


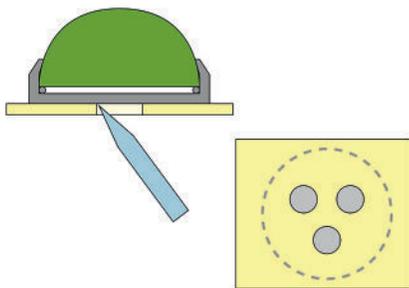
Concealed welding

Welding with the PUK allows precise connections without heating up the whole workpiece. Further treatments like pickling are not necessary because there is no demand for flux. Therefore single components can be completed already before assembling. Surfaces can be finished or for example enamelled or lacquered in advance. Of course, already set stones are no problem as well.



1. The task

A setting with a bottom in which the stone has already been set must be welded neatly on a ground plate. All parts are already finished; therefore an outer seam should be avoided.



2. Concealed welding at the rear side

If the material gauge of the ground plate allows to reach the welding spot easily, it can be welded from the rear side. So as to avoid a possible damage of the stone, it should not seat directly on the bottom of the bezel, if possible.



3. Preparation

Several holes of approx. 2.5 mm in diameter are drilled in the ground plate. Various layouts of the drill holes are possible; this version with three holes provides enough stability to withstand stress in all directions.



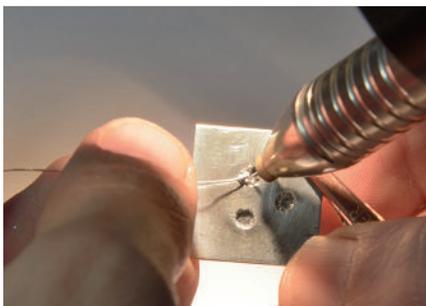
4. The settings

The settings of the welding parameters depend on both the material and the material gauge. In this case with a ground plate of 0.7 mm, the recommended settings are approx. 45 % power and 4 ms welding time in the gap mode.



5. Welding from the rear side

The setting must sit properly on the ground plate so that there are no gaps. Then the weld is accomplished inside the drill holes all around.



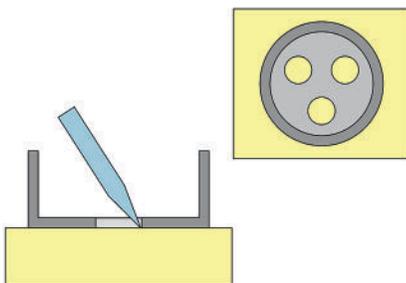
6. Filling the drill holes

If the rear side should be visible at the end, the holes can be filled with material of the same alloy.



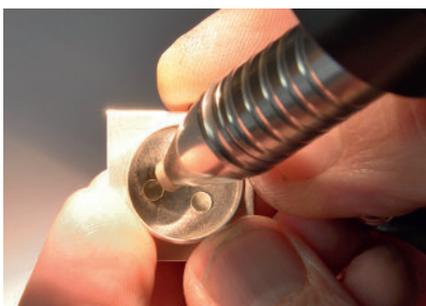
7. Finishing

Finally the work can be cleaned up and polished as needed.



8. Concealed welding from the top

If the material gauge does not allow welding from the rear side and if the stone can be set later on, it could also be connected by a hidden weld inside the setting from the top. For this, the drill holes are placed at the bottom of the setting.



9. Welding from the top

With the same settings as mentioned before the workpieces can be welded inside the drill holes from above.