

Fused glass bowl with a processed edge



Glass bowl " Spring " with beveled edge

approx. 18 cm (7")



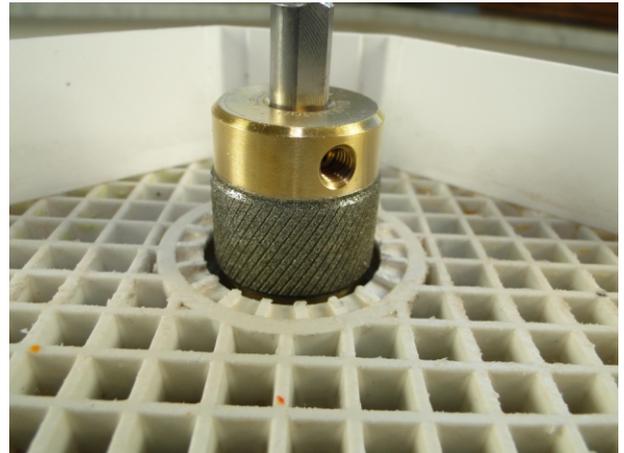
ground edge in detail



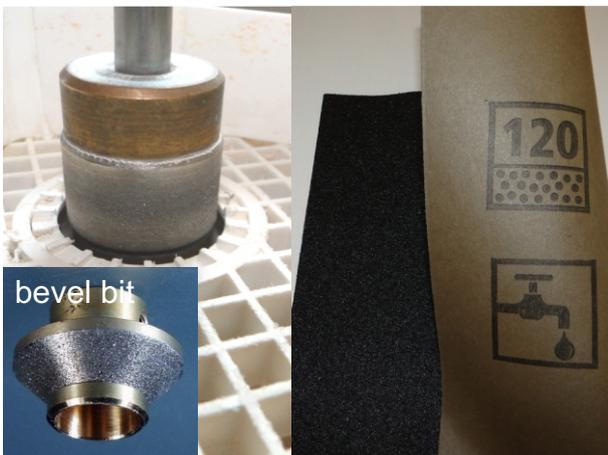
Material shown in example:
Bullseye 1426-30F green transparent
Bullseye 0113-30F white opalescent



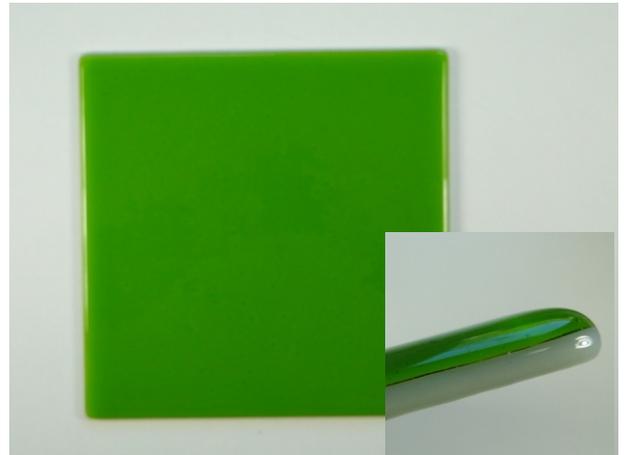
All you need is a regular glass grinder. Here the Kristall 2000S with integrated flushing system.



...a very rough grinding head for the preliminary work, strong but not cracking the glass edge's sides. I have the best experience with the 25mm (1") Bohle "turbo" (3020105)



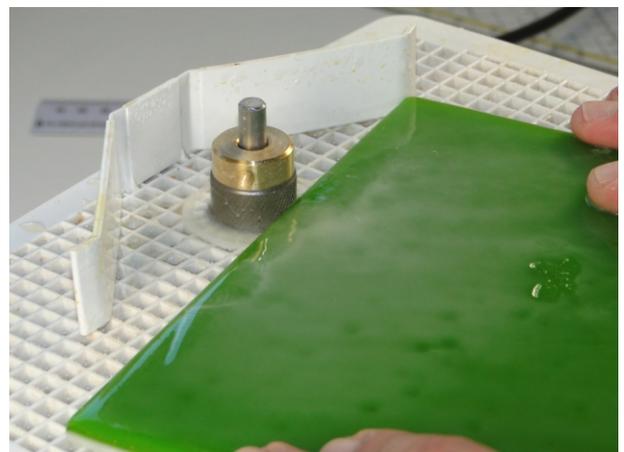
For fine regrinding a grinding head with a fine coating (same diameter as the coarse / turbo). Here Bohle 25mm (1") fine 3020101 and some 120 grit wet sandpaper AND a bevel bit.



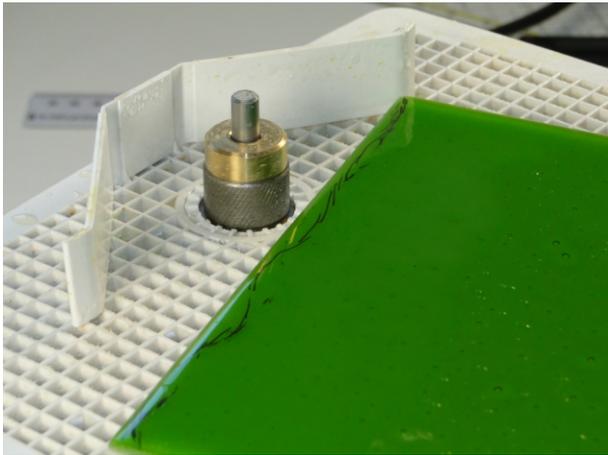
At first you fuse a 6mm, consisting of two layers 3mm, glass plate (fullfuse). here 18 x 18 cm (approx. 17 x 17").



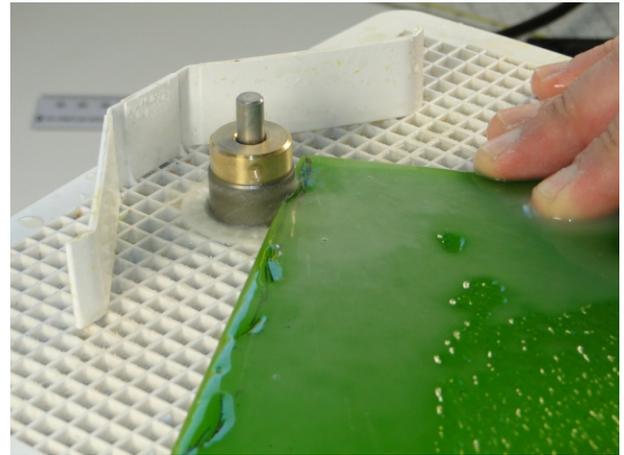
Characteristic of a two-layers-full-fused plate is the rounded edge.



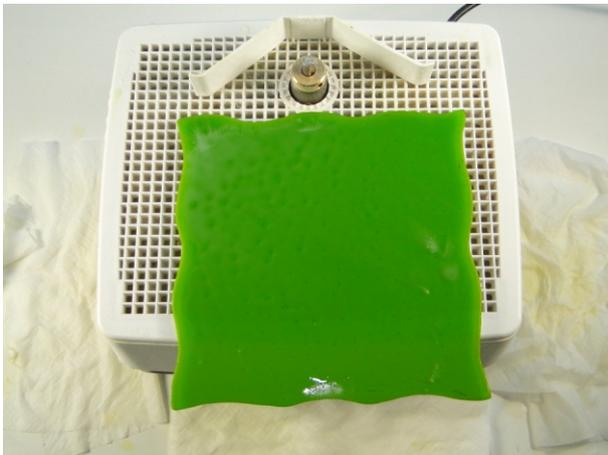
This rounded edge grind off now. Here the "turbo" head is important because this significantly grinds faster than a regular coarse head. You will have to grind off quite a lot of material ...



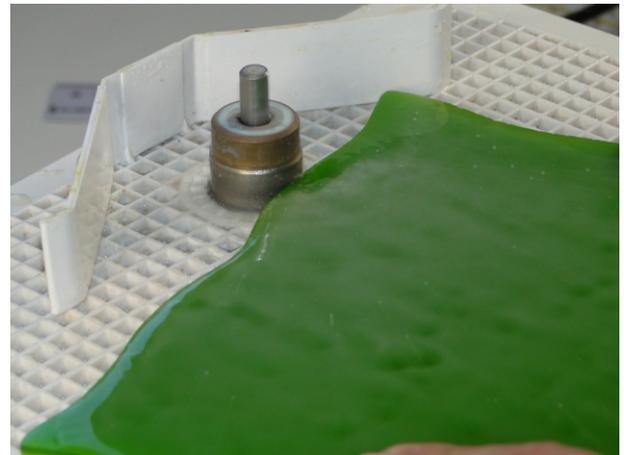
Now draw the design of the edge
- here in wavefrom



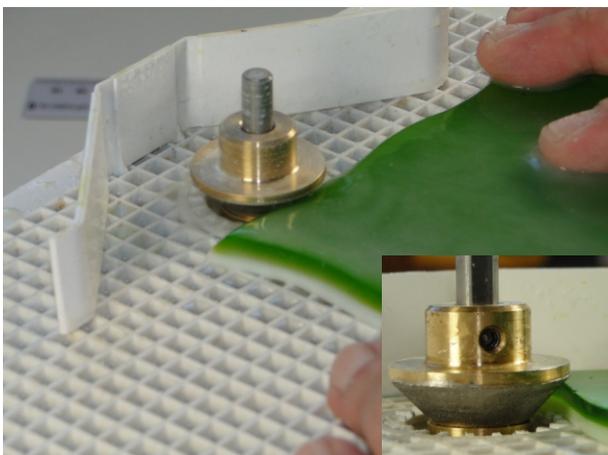
Along marked lines you now grind the slightly
curved edge.
- With the turbo head, it goes faster ...



The coarse grinding works are now complete.



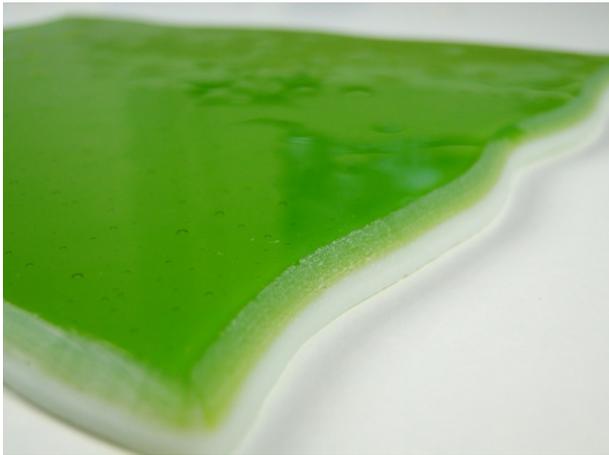
Regrind with the fine head, to refine
the grinding marks.



With the phase grinder now you grind a facet.
(here grinding bit 3020713 with 45° angle)
Note: this works best with the grinding machine
Kristall 2000S, since this has an integrated automatic
and sufficient water supply system (circulation system).



In the next step you deburr the edges with
wet sandpaper (120 grain).
With the sandpaper you can regrind
the ground surfaces again.



Detail of finished ground edge.



..now into the kiln...
slumped - ready !
In the example used form:
3522577
Spherical Bowl 27x7cm

You can choose from the following bevel bits (brand Bohle):



3020713/45°



3020711/30°



3020708/12°



3020705/7°

Material and firing schedule...:

These firing schedules are guidelines only,
they must be adapted to the particular kiln, the glass used and the desired result.

Full fuse of the two 3mm glass sheets to one plate:

1. 120min - 500°C
2. skip - 650°C
3. 60min - 650°C (Bubble step, bubbles are smaller and less)
4. skip - 785°C (don't go to high in temperature to minimize bubble extension)
5. 20min - 785°C
6. skip - 520°C
7. 120min - 520°C
8. 120min - 460°C
9. END

Slumping the completely edge processed and cleaned glass plate:

1. 120min - 500°C
2. skip - 680°C (Note: rather start at 10°C less and adjust the temperature)
3. 60min - 680°C
4. skip - 520°C
5. 120min - 520°C
6. 120min - 460°C
7. END