

## Thermal shock due to glazing

### Cause

Vitrification of quartz occurs when the application temperature is too high or the holding time is too long. If a quartz crucible is vitrified, it is amorphous and sensitive to temperature. After vitrification, the ceramic no longer consists of many small crystals, but of one large crystal which shatters due to the thermal shock when reheated (Picture 1 and 2).

### Troubleshooting

Vitrification can often be recognised by the darkening of the shard (picture 1, 2, 3 and 4).

If vitrification is extreme, the area may become almost transparent (like milk glass).

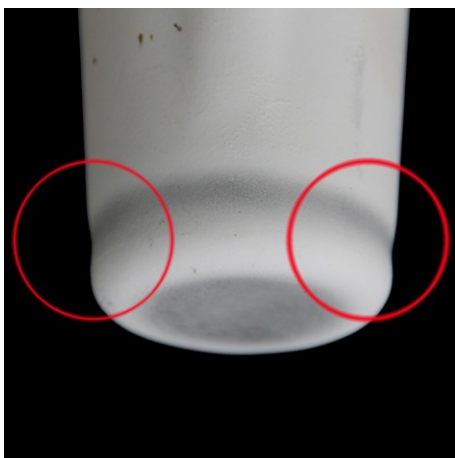
The melting point of the quartz is reached during vitrification, the shard becomes soft and can deform (picture 3).



picture 1



picture 2



picture 3



picture 4