

Carbonation Stone Care Guide

Glacier Tanks' carbonation stones are made of stainless steel 316 and manufactured by a sintering process, which creates a stone porous enough to provide effective carbonation and oxygenation in most systems. However, porosity creates distinct disadvantages for any materials. The structure is brittle, susceptible to rust intrusion or clogged pores, and easily shattered. Improper care will enable these issues to arise in a matter of days and potentially cause complete failure of the stone.



Figure 1. A carbonation stone in new condition.



Proper handling ensures optimal operation of your carb stone over its life span:

- 1) When removing the stone from a tank, and avoid rubbing the stone on the ferrule walls
- 2) Hold the stone by the tri clamp end, and avoid touching the porous body
- 3) Store carb stone away from other fittings that may dent, scratch or damage the body

Any rubs, dents, and scratches to the body will hinder the dispersion of CO₂ and reduce the stones lifespan. Once the stone has been safely removed for cleaning, we recommend clamping it inside a protective shell such as a 1.5 inch spool or sparge arm of equal or greater length. This simple step will go a long way towards guarding the stone body.

Over time beer stone, yeast, and other debris can build up on the stone and clog the pores decreasing the maximum CO₂ volume that can pass through the stone. Regular proper cleaning helps avoid this blockage and contamination issues without risk of stone failure. Following a cleaning procedure, remove the carb stone and allow it to air dry in a safe place.

Figure 2. Scratches and caked on product. This decreases the effectiveness and life of the stone.

Avoid the most common mistakes and NEVER:

- NEVER touch the sintered portion of the stone. The natural oils from your hands will clog the pores and reduce the lifetime of the stone.
- NEVER carelessly remove the stone from your tank. Bumping the stone against the walls of the ferrule (or anything) can result in scratches in the sintered stainless which will close pores (Figure 2) and is enough to reduce the flow of the CO₂.
- NEVER clean the carb stone using chlorine-based solutions such as bleach, or anything containing any form of chlorine ion. This will cause the stone to degrade and fail quickly.
- NEVER allow the carb stone to soak overnight, particularly in plain water. This is almost guaranteed to cause rusting issues (Figure 3). Always allow the stone to fully air dry after a normal cleaning cycle.
- NEVER drop the stone into a cleaning bath by itself. The drop itself may break the stone, or damage it from bumping against other fittings (Figure 4).



Figure 3. Rust starts due to improper care.



Figure 4. Carb stone treated carelessly with other fittings.

Protect your carb stone investment and ALWAYS:

- ALWAYS handle the stone by the tri clamp connection.
- ALWAYS be gentle with the stone.
- ALWAYS connect the stone to a spool or sparge arm when placing into a cleaning bath with other fittings.
- ALWAYS clean the stone after use. It is SS316 so it can handle normal (non-chlorine based) brewery chemicals.
- ALWAYS allow the stone to fully air dry.
- ALWAYS use a food grade gas through the stone.