

Beer Carbonation by Mike Retzlaff

Just like with serving temperatures, every style of beer has a “sweet spot” for the carbonation level which brings out the best of that style. Within every style of beer, there are examples which seem better served above or below the average carbonation.

Whether you find a description of a beer in the BJCP guidelines, BA guidelines, or elsewhere, it is sometimes difficult to determine just what “low to moderate carbonation” actually is.

Based on some rough guidelines I’ve found in print and tempered by my own experience, I’ve put together a short approximation of how those values translate into a usable figure.

Style	vol. carbonation
American Ales	2.45
US Lagers	2.6
Euro Lagers	2.5
Belgian Ales	2.15
British Ales	1.75
Weizenbier	3.65
American Wheat	3.25
Lambic	3.75
Fruit Lambic	3.55
Porters & Stouts	2.1

Carbonation level	Average vol. CO ₂
Low (Scottish Ales, British Bitter)	0.8 – 1.2
Low – Moderate (Old Ale, Mild)	1.2 – 1.7
Moderate (Brown Ale, British Pale Ale, Barleywine)	1.5 – 2.2
Moderate – High (US Pale Ale, German lagers)	2.2 – 2.6
High (Weizen, Lambic)	2.7 – 4+

Lower carbonation levels seem to bring out the malt in a beer while higher carbonation levels seem to augment hop bitterness, flavor, and aroma.

Higher carbonation levels are restricted to heavier walled glass bottles or kegs. Normal

12oz. long neck bottles can become grenades at such pressures.

Carbonation charts abound on the internet which will give you values of carbonation as it relates to pressure and temperature. Many software programs will calculate the amount of priming sugar or krausen needed to achieve the target fizz you desire.

Even after you’ve made a decision on the amount of carbonation required for a certain beer, you still have to deal with dispensing. In a keg system, length of run from the keg to the tap and hose diameter can be critical to a good presentation in the glass. High CO₂ pressure combined with a short run of too large a hose will give you a glass full of foam. The same pressure combined with smaller and longer tubing may give you a perfect pour. There is a lot of science and art in setting up a keg system.

Go to the CCH website and find the BA Draught Quality Manual. It is located under ABOUT / ARTICLES / TECHNIQUES. It can give you quite an education on the inner workings of a dispensing system. Even if you have a draught system which seems to work well, you may find a few ideas to help fine tune it.