



## *American craft beer on draft*

### (using petainer kegs)

#### **CO2 & Draft Beer**

Carbon dioxide is natural to the brewing process and is considered an ingredient of the brewer's recipe. CO2 has flavour characteristics and must be maintained with the gas pressure source, or the product will either become flat or gassy. The CO2 content in beer is measured in volumes.

Temperature, applied gauge pressure (Pounds Square Inch Gauge – "PSIG") and the gas blend ratio influence the CO2 content. If the CO2 partial pressure in the mix is too low, this allows CO2 to leave the beer and enter the keg's headspace resulting in flat beer. If it is too high in the mix, CO2 is imparted in the top surface layer where the beer and gas headspace meet, saturating the beer. This layer of gas-saturated beer will eventually be at the bottom of the keg and it will be like trying to dispense a beer mousse – all foam. These conditions are undesirable for pour cost or resale at a retail establishment. The key is to apply the correct CO2 partial pressure to maintain equilibrium in the keg, so the CO2 in the beer does not leave solution nor is there gas being imparted into the beer.

#### **The Right Gas Blend**

The gas blend ratio is based on the CO2 volumes of the product, temperature of the beer and required pressure to the keg. CO2 Volumes for stout beers such as a Guinness range from 1.2 volumes to craft stouts with up to 1.7 volumes. Ales and lagers can range from 2.2 up to 2.8 volumes and in some cases, higher. An ideal liquid temperature is 38° F. A survey of American consumers finds this to be very desirable temperature for consumption and the CO2 in solution is very stable. The "PSIG" at the keg using mix gas normally range from 20 to 25 PSIG for ales and lagers to 30-40 PSIG for stouts.

As a general guide, to acquire equilibrium with stouts a 25% CO<sub>2</sub> / 75% nitrogen mix is ideal and for ales and lagers a 60% CO<sub>2</sub> / 40% nitrogen ratio. However, other variations can work well depending on the pressure (PSIG) and technical facility. For a more in depth explanation and recommendations, download the [Brewer's Association Guide to Quality Draft Beer](#).

#### **Couplers**

All Heathwick American Craft Beers come in Petainer Kegs and require an American Sankey D type Coupler. [Click here for full details on how to connect, store and work the petainer kegs.](#)