

Three Types of Draft Beer Dispensing Systems

Overview

Introduction There are three different types of beer dispensing systems commonly used in the United States today. All three-system types have their own specific functions, components and application depending on space and cost considerations.

Purpose The purpose of this document is to describe the basic functions and components of the three types of draft beer dispensing systems.

Three Beer Dispensing System Types

Direct Draw The most common and simplest system is the Direct Draw system.

This system is used when the keg of beer is located within a few feet of the beer dispensing faucet.

The applied CO2 gauge pressure will be set at between 13 - 15 PSI (Pounds per Square Inch) depending on the type of beer, storage temperature and elevation.

The beer tubing will consist of approximately five feet of 3/16 ID vinyl beer tubing. This will vary depending on the applied gauge pressure. (View the article titled, "Balancing Direct Draw Beer Systems".

! Most commercial keg boxes, home bars, and refrigerator conversions use this type of dispensing system configuration.

Air Cooled System The second dispensing system is the Air Cooled system.

This system utilizes either a single or a double insulated air duct(s) with a large blower fan circulating the air to maintain the beer temperature from keg to faucet.

This system is only effective for systems less than 25 feet in length. If bends are required in the ductwork the distance is reduced by 5 feet for every 90 degrees of bent ductwork.

A large electric fan, located in the cooler, near the source of the refrigerated air, circulates cold air through the ducts, which house the beer tubing.

Three Beer Dispensing System Types (continued)

Glycol Cooled System

The third type of system is the Glycol Cooled system.

The Glycol Cooled system utilizes a glycol cooler to recirculate Propylene Glycol through polyethylene tubing, which is wrapped to be in constant contact with the beer tubing. All these tubes are encased within an insulated housing, called a Trunk Line.

The glycol maintains the beer's temperature from the walk-in cooler to the beer dispensing faucets.

Correct carbonation levels are obtained by using a blend of CO₂ gas and Nitrogen gas. This blend of gasses allows the applied pressure to be increased to propel the beer the required distance without over carbonating the beer.

View the article titled, "Blended Gases" for additional information.
