

In the United States today Mixed Gas for dispensing beer is still a brand new science. We've sold well over 100,000 **Trumix**® blenders in England but less than 50,000 here in the US. There is strong evidence that the potential market here in the US and Canada is much greater than Europe: We can sell a lot of blenders in the years ahead.

The combination of sales potential and the general lack of knowledge makes this sales area ripe for abuse. By selling the **McDantim Trumix**® you have committed yourself to providing the most consistent, most cost effective and most reliable tool available for providing mixed gas. The more you learn about using and choosing the right blend and the right gas source the better service you provide for your customers. In all cases the real reason for using mixed gas is to help the retailer deliver the same beer the brewer brewed. We do this by making sure that the gas content of the beer remains constant until the keg goes empty no matter how long that is.

Why Mixed Gas?

Potential Customers need Mixed Gas for two reasons:

1. They are serving a **nitrogenated beer** like Guinness or Pyramid DPA.
2. They dispense some or all of their beers over the "balance point". (The pressure above which 100% CO₂ will over-carbonate the beer.)

All beers have CO₂ dissolved into them. Nitrogenated beer has nitrogen dissolved into it also. To properly serve nitrogenated (nitro) beers mixed gas must be used.

- Pure CO₂ will allow the nitrogen to come out of solution.
- Pure nitrogen will allow the CO₂ to come out of solution.

In either case the beer no longer looks or tastes the same. The correct blend with these beers is usually dictated by the brewer but in most cases it will be 25 to 30% CO₂ and the rest Nitrogen. Guinness, for example, recommends 25% CO₂ with the beer dispensed at 30 psi. Maintaining the correct blend and dispensing pressure are necessary to maintain the correct proportion of both gases. Note: With most nitrogenated products a restricting/agitating faucet (often referred to as a Guinness or stout faucet) will greatly enhance the appearance of the nitrogenated effects.

Beers served above the balance point are a different story altogether. All beers, whether Budweiser or Black Butte Porter have a certain amount (vol / vols) of CO₂ dissolved in the beer. The carbonation is an ingredient chosen carefully by the brewer. Our job is to pick a blend that maintains this level of dissolved CO₂. We use the temperature and dispense pressure of the bar's conditions and chose a blend of CO₂ to match. Nitrogen simply provides the *extra* pressure necessary to dispense the beer.

The correct blend keeps the beer at the correct carbonation level throughout the whole keg, no matter how long it is on tap.

Mixed Gas will (used correctly in a properly designed system):

- Keep a “nitro” beer properly carbonated and nitrogenated
- Keep beers properly carbonated, no matter how long they’re on tap
- Prevent beers from going flat
- Prevent beers from going wild
- Prevent wasted beer
- Reduce foaming problems due to temperature fluctuations.

Mixed Gas will not:

- Give your beer the creamy head of a “Guinness”
- Fix Beer that is already over-carbonated
- Eliminate all foaming in poorly designed or maintained dispense systems

Too much CO₂ in the blend will:

- Cause foaming and over-carbonating. (It’s just a matter of time.)

Too little CO₂ in the blend will:

- Cause the beer to go flat. (Guaranteed, it’s just a matter of time.)

Choosing a Gas Source

Air

Advantages:

- Low Operating cost

Disadvantages:

- *Will damage beer flavors.* Air contains oxygen which will shorten the life of beer drastically and can carry other flavors into the beer. Air also contributes to the growth of several organic contaminants, requiring more frequent line cleaning. *Air is a poor choice as a dispensing gas and its use will diminish and eventually disappear.*

Premixed Bottles

Advantages:

- Low initial cost

Disadvantages:

- Most expensive source of gas.
- Least convenient, requiring the most frequent cylinder changes.
- Least adaptable; very few blends are available. I often suggest cylinders to potential customers who are either very low volume or who are trying a “nitro” for the first time.

Other Blenders oriented toward beer (Needle valve and fixed orifice type)

Advantages:

- Low initial cost

Disadvantages:

- Too inaccurate for reliable beer dispense.

McDantim Trumix® Blender

Advantages:

- Moderate initial cost
- Extremely accurate ($\pm 2\%$)
- Reliable
- Complete choice of blends
- Tamper-proof
- Most economical source of accurately mixed gas
- 100% satisfaction guaranteed
- Shuts off if either gas fails or runs out

Disadvantages:

- Not normally field adjustable

Bottled N₂ and CO₂ with McDantim Trumix® Blender

Advantages:

- Easy to find and set up
- Low initial cost
- Economical source of mixed gas

Disadvantages:

- Requires bottle changes
- Gas can run out at inconvenient times

Bulk N₂ and CO₂ with McDantim Trumix® Blender

Advantages:

- Very economical source of mixed gas
- Very convenient, no bottle changes

Disadvantages:

- Not available in all areas
- Not always cost effective for small operations

Generated N₂ with McDantim Trumix® Blender

Advantages:

- Very economical source of mixed gas
- Very convenient, no bottle changes
- Can be leased

Disadvantages:

- High initial Cost
- Not always cost effective for small operations
- Small amount of service required