

## Nitrogen Use Keeps Wines Fresher, Tastier and Longer Lasting

By Gerald Dlubala for The Grapevine Magazine



Utter the word “oxidation” in a room of winemakers, vintners and related equipment manufacturers, and immediately catch everyone’s attention. That’s how vital oxidation and its potential ramifications are in the wine industry. In winemaking, oxidation is successfully controlled during bottling by introducing a dosage of nitrogen. Concerns and the desire for increased consistency in flavor and bouquet, along with the opportunity for increased shelf life, give many winemakers the only incentive they need to consider adding nitrogen dosing to their bottling process.

Dana Muse, International Technical Sales Engineer at Vacuum Barrier Corporation also believes that nitrogen is a critical part of the bottling process. “It’s used to help reduce oxygen to improve the shelf life and maintain a consistent flavor and bouquet. Some small, controlled oxidation may be an intentional part of making wine, but overoxidation during the bottling process alters the characteristics of the wine and causes premature spoilage.” Vacuum Barrier Corporation engineers and fabricates liquid nitrogen dosing and piping systems for multiple industries, including the wine industry. Nitrogen dosing can be used in two different ways depending on the desires of the winemaker. “Nitrogen can be used to flush the air and oxygen out of the empty bottle before filling, or it can be used to flush air and oxygen out of the full bottle before the closure is applied,” Muse said. “Some wineries use nitrogen at both locations.” Some winemakers such as Tony Kooyumjian, longtime owner at Augusta Winery, a multiple international gold and silver award winner based in Augusta, Missouri, go even further, using nitrogen as often as possible. “All stages of the winemaking process lend themselves to oxygenation, so the more of those steps we minimize, the better,” he said. He was using so much nitrogen that about 10 to 15 years ago he finally purchased a system and started producing nitrogen on demand right on the property. While being costly up front, Kooyumjian said that the system paid for itself within approximately three years. He uses nitrogen in the pre- and post-fill process, but also in the lines to reduce the amount of oxygenation occurring during liquid transfers. By doing it this way, he aims to preserve the shelf life, purity, and integrity of his wines. Based on the rewards and recognition he has received over the years, it must be working. [Read entire article](#)