



## LIQUID NITROGEN DOSING

### CHALLENGE

- Inert for oxygen reduction
- Nitrogenate: with or without a widget

### SOLUTION

Dissolved oxygen in beer is closely monitored and controlled throughout the brewing process, but O<sub>2</sub> pickup can occur during filling. Reducing O<sub>2</sub> in the headspace preserves the flavor and aroma of the beer.

Nitro-style beers are a growing segment of the craft brewing industry. The same equipment used to purge the headspace can also be used to nitrogenate a beer to get the smooth, creamy, and attractive cascade effect after pouring, with or without a widget.

### HOW LIQUID NITROGEN DOSING WORKS

- A small, precise droplet of Liquid Nitrogen is dispensed into a can or bottle
- The LN<sub>2</sub> vaporizes, expanding to fill the headspace
- Sealing the container before the vapor escapes traps Nitrogen gas
- The trapped volume of gas pressurizes the can or bottle, forcing Nitrogen into solution
- To inert the headspace, the vapor must be allowed to expand and push out O<sub>2</sub> before the container is sealed.

### ADVANTAGES OF USING LIQUID NITROGEN

- Nitrogen is inert—will not react with product
- Efficient & Versatile—can be used in many different packaging applications
- 78% of atmosphere is Nitrogen—readily available and safe