

## Carbon Dioxide (CO<sub>2</sub>) Gas

- Application** Moisture monitoring in carbon dioxide gas. (One example is in beer brewing industry where CO<sub>2</sub> is injected into the brewing process.)
- Problem** Carbon dioxide gas will cool greatly as it drops in pressure. High pressure cylinders must be kept dry since excessive moisture can condense out and possibly freeze-up inside the piping. This will block the flow of the gas.
- Solution** Continuous monitoring of CO<sub>2</sub> lines to catch excessive moisture before freeze-ups occur.
- Equipment** CO<sub>2</sub> will cause sensor drift of continuous monitoring instruments during the first several weeks of service. These sensors must be specially conditioned in CO<sub>2</sub> before calibrating. Always specify “CO<sub>2</sub> service” with an order to get conditioned sensors. The factory typically will have sensors in the conditioning stage. Portable instruments, due to their fast response and short duration of use, do not need the conditioning treatment.
- Advantages** The CO<sub>2</sub> conditioning process allows for accurate calibration of our continuous monitors without the inherent drift found in competitive instruments.