The More You Know



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Nitrogen Is No Problem.

Did You Know... Every so often, the crack Customer and Field Support Services team are asked if a particular valve is "good for nitrogen". Without further detail or explanation of the system, the simple answer is **YES** for all our Milwaukee Valve products. The exceptions are check valves, which are only to be used for liquids.



So, why is this answer so simple and straightforward? First, let's assume the customer is talking about gaseous nitrogen. (More on liquid nitrogen later.) Nitrogen makes up about 78% of the earth's atmosphere. In the time it takes you to read this, you've inhaled somewhere between 1-2 cubic feet of nitrogen. Nitrogen is non-flammable, nontoxic, colorless, odorless and chemically inert. It's pretty safe stuff. The application of most of commercial uses for nitrogen involves the displacement of oxygen. In the case of a chemical plant where the atmosphere may be highly combustible, nitrogen is widely used in process equipment and instrument control lines. Remember, things only catch fire and go boom in the presence of oxygen. In food processing, nitrogen is often used in packaging to prolong freshness. For instance, winemakers use nitrogen in the sparging process to remove dissolved oxygen, which will thereby improve the

taste and shelf life. Nitrogen molecules are found in almost every synthetic drug produced by pharmaceutical manufacturers. And of course, those with money to waste will inflate their tires with nitrogen.

Being inert, nitrogen is chemically compatible with all materials used in our valves. In the case of a ball valve,

a BA-475B will be just fine for most applications.

On the other hand, **liquid** nitrogen is a different story all together. The boiling point of nitrogen is around -320 deg F. That's cold. Really cold. Specially designed valves for these cryogenic services are



available in the marketplace, but beyond the capacity of valves currently produced by Milwaukee Valve. Maybe someday.

So, when it comes to pure gaseous nitrogen, there's nothing magical or scary here. Practically speaking, any of our valves will do the job. As always, we're here to answer any questions.

For questions concerning nitrogen or concerns about severe service applications, visit <u>www.MilwaukeeValve.com</u> or contact your Milwaukee Valve customer service rep today. A complete listing, by territory, can be searched at our website, at <u>www.MilwaukeeValve.com/Find-Sales-Rep/</u>.





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