Vacuum Pumps

Seal the deal.

Vacuum in a brewery is still a relatively new application. It is most often found in the bottling or packaging processes at established breweries. When considering a vacuum pump for your brewery, there are two main technologies to consider – a liquid ring pump or rotary screw.

A liquid ring pump is inexpensive and robust but requires a lot of water usage, is not the most energy efficient technology and can flood the system or production floor.

A rotary screw vacuum pump eliminates water usage, incorporates a foam dampening water trap to capture water and foam during the bottling process and is more energy efficient, serving as a more environmentally friendly option.

CONTACT US

If you have questions on how your craft brewery can benefit from compressed air, gas or vacuum, ask your compressed air or vacuum provider to arrange an applications assessment.

Atlas Copco Compressors LLC
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Rock Hill, SC 29730
1 (866) 546-3588
atlascopco.com/air-usa

Applications

- Evacuate air in bottles before sealing
- Product Preservation
- Labeling
- Packaging Process

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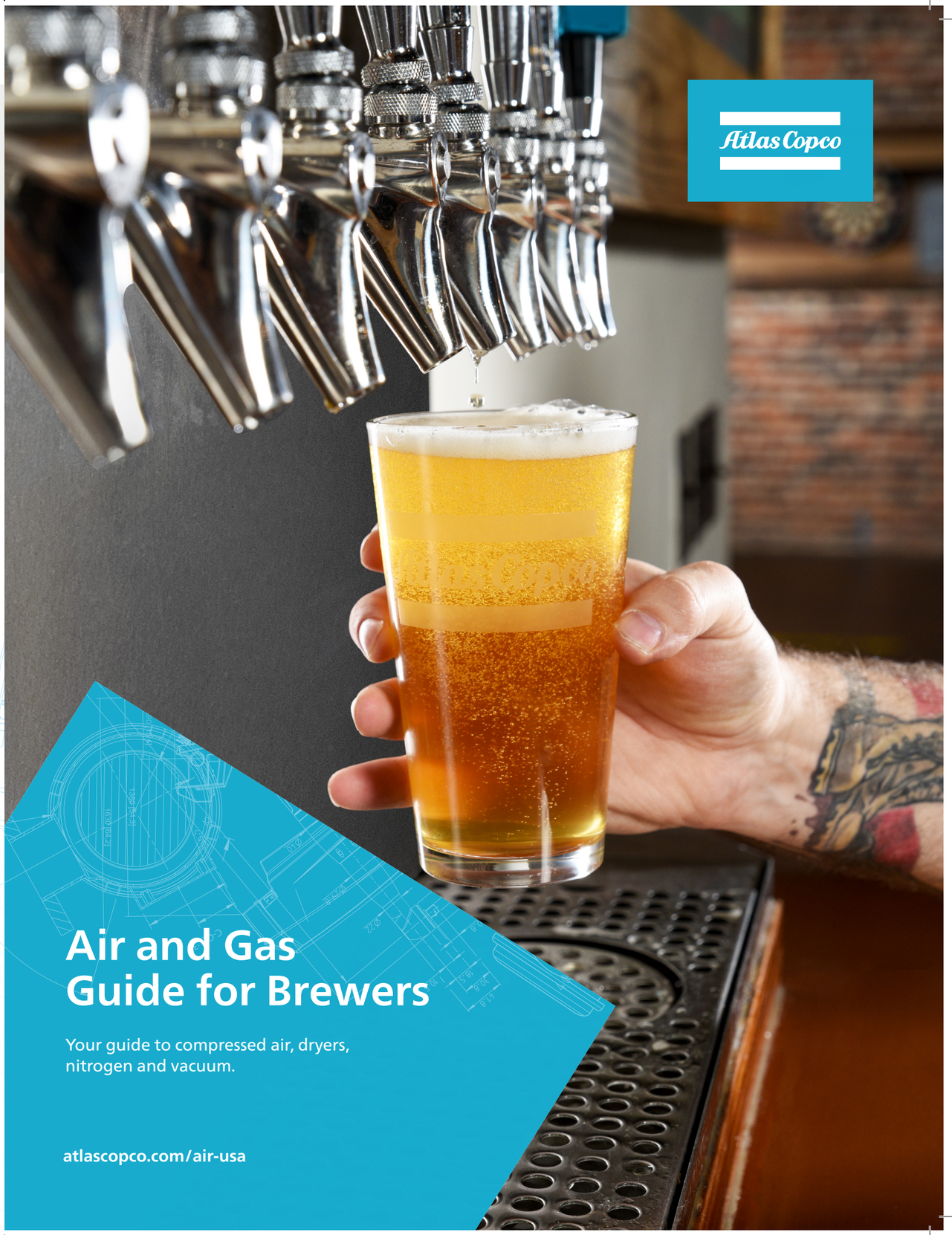

Air and Gas Guide for Brewers

Your guide to compressed air, dryers, nitrogen and vacuum.

atlascopco.com/air-usa

The Base Ingredients

One of the most daunting tasks when starting a brewery or growing an existing one can be sizing equipment. You need to consider what your needs are now, how they'll grow, to what size will they grow and when will you reach your projected levels of growth.

Like the ingredients in beer, it starts out simple – water, malt, yeast and hops. Then you perfect the recipe with a variety of hops and flavors, much like the process for purchasing equipment. When you think of an air compressor, you may think of a piston but did you know there's also oil-free options and integrated dryers? Or have you considered switching or mixing CO2 with N2? This guide will briefly cover a few of these questions for you.

Compressed Air

Applications

- Supply air to keg washer, bottling or labeling line
- Packaging
- Controlling pneumatics
- Aeration
- Transportation of product
- Clarifying beer

Oil-injected, oil-injected with a filter, or oil-free? The choice is yours.

The first thing you should ask when purchasing an air compressor is whether the air will be coming into direct contact with your beer or not. If you are only using air in a robotic application, such as controlling the pneumatics of a machine, your air quality is less important. If you're using for aeration, in your bottling or keg washing, you need a high-performance air filter in your system or an oil-free air compressor. By not filtering the air, you're contaminating your lines and beer. The beer contamination will alter the taste of the beer and create build up in the lines, thus damaging your other equipment. Oil-free air keeps the environment, equipment and final product pure.

Refrigerated Dryers

When air is compressed, it becomes hot. Hot air equals humidity. It's important to remove this from your application regardless of whether you go with an oil-free or oil-injected air compressor. Incorporating a dryer in your system will remove the humidity and contaminants from entering the tank or lines to other processes.

An air compressor with an integrated dryer would be ideal, however if you already have the compressor, you can add a dryer and connect with aluminum or stainless-steel air piping. Dry air provides clean air to your equipment, protecting your lines and other mechanisms. By not including a dryer, you risk build up entering other processes, such as the keg washer or bottling line.

Nitrogen Generation

Save up to 80% by generating onsite.

The national average to have bulk nitrogen delivered is around $1.00/ccf while generating onsite with a nitrogen generator, such as the NGP+, costs an average of $0.20/ccf.

Generating this inert gas onsite can lower costs and reduces gas waste left in cylinders. It also eliminates your dependency on an outside supplier, freeing you from being tied into a contract and eliminates the need to predict how much you will need month by month. On average, a nitrogen generator has a payback period of two years.

Nitrogen generators use compressed air, then remove the oxygen so all you are left with is nitrogen and argon molecules. With a generator, you have a stable, on demand supply of nitrogen with a purity level of your choosing between 99.5%-99.999%.

Applications

- Purge tanks
- Transportation of product
- Freshness
- Pressurize kegs
- Carbonation