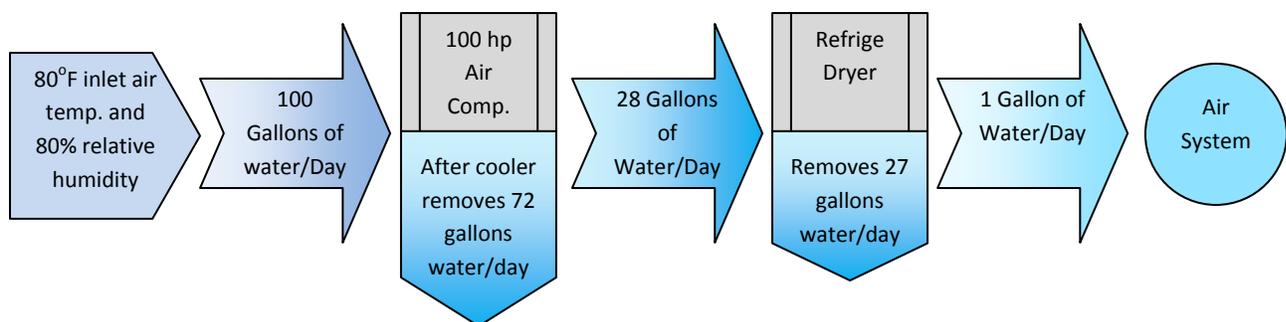


Why is My Air Dryer Not Working?

Think of your air compressor as a “rain-maker.” At 100 psig, a compressor takes eight volumes of air and compresses them into one. At 80°F inlet air temperature and 80% relative humidity, a 100 HP compressor will take in 100 gallons of water vapor per day. The compressor’s aftercooler can remove 60-70% of the moisture, but beyond that the compressed air coming out of the machine is saturated and it goes into your air system as condensed water vapor. As the air cools from the hot discharge of the compressor, the ability of the air to hold water is reduced by 50% for every 20° F degree drop in temperature. The air moves downstream and as it cools, the water continues to drop out. This can add up to a lot of water.



“The summertime combination of high humidity and high ambient temperatures creates the possibility that your compressed air dryer system can’t beat the heat.”

Compressors provide compressed air . . . and with it potentially lots of water!

Through most of the year, a little extra moisture in your process may not be much of a concern, but with summer temperatures and humidity, that can change. In the vast majority of industrial processes, excess moisture in compressed air lines can be more than a nuisance. In fact, it is a costly source of equipment failure. It can cause substantial damage to pneumatic tools and lead to damaged and corroded pipes, both of which ultimately results in product contamination and increased costs.

“As the summer heats up, moderately undersized and under-performing dryers begin to labor, and sometimes completely fail.”



Troubleshooting Refrigerated Dryers

- Drain valve may not be working correctly – check and repair if needed
- Cooler (condenser) may be clogged restricting air flow – clean (blow out)
- Air by-pass valves open - close by-pass valves
- High ambient temperatures - Add more ventilation
- High compressor air delivery temperatures - install pre-cooler or install resized dryer for your operating conditions
- Check your pre and after filters – replace element if necessary
- Loss of refrigerant - call 866-468-9814
- Suction pressure abnormal - call 866-468-9814

For more information on compressed air equipment please call the compressed air experts at Air Technologies 866-468-9814.