



# Compressed Air Facts

## **THE #1 RULE OF COMPRESSED AIR**

For every 20 degrees that compressed air is cooled, the air loses 50% of its ability to hold moisture (humidity) in vapor form and is dropped out as a liquid

Air Drying and Air Filtration.... There is a Difference!

**Air Drying** - The removal of water vapor (humidity) from compressed air which is typically accomplished in one of three ways:

- Desiccant (molecular sieve, activated alumina, silica gel)
- Membrane
- Refrigeration

### **When to use compressed air dryers**

- Air dryers should be used when you want to remove or reduce the humidity levels in your compressed air system to meet the manufacturers' requirements for their paint systems

**Air Filtration** - The removal of particulates, water, oil droplets, and oil aerosols.

This is most effective when done in stages:

- Water separator - removes bulk water, oil, and large particulates
  - ◆Down to 10 micron
- Coalescing filter - removes oil, small aerosols and fine particulates
  - ◆down to .01 micron
- Activated carbon filter - removes oil vapors; eliminates odors and taste
  - ◆down to .003 ppm

### **Where to place compressed air filtration**

- The further away from the compressor, the more effective your filtration will work
- Inside or near the spray booth, directly connected to your spray hose

### **IMPORTANT**

- In front of all air dryers as pre-filters
- Water separators should be placed at all air tool drops with regulators