

INDUSTRIAL AIR COMPRESSOR INSTALLATION TIPS

By Brit Thielemann



So, you've determined you need an industrial air compressor for your facility. Whether you're a first timer or a veteran, deciding the proper size compressor for your facility, as well as how and where you install your air compressor, is critical to your facility's success.

Next to water, electric and gas, many companies view compressed air as a fourth utility. Without it, manufacturers cannot operate their product-making machinery. This means compressor installation should be treated with the same care and detail that is given to water and electricity installation.

Before the compressor installation begins, there are some simple steps to take. The first step is to understand what

size and type of compressor is needed for the site, taking into consideration both current and future needs. This is where a professional compressed air consultant is very important. An air survey (audit) should be performed to discover all the needs of the site. Once this is complete and compressors are purchased, then the planning of the installation becomes an important function.

Air cooled compressors need good airflow for proper operation. Most manufacturers require a minimum of three feet of open space around the units for good airflow in and out of the machines. This also provides the maintenance technician enough room to work on the units when required. If the air compressor will be placed in an enclosed room, please be sure that no negative pressure is allowed. The door to the room should not slam shut as you enter, and one should not have to force the door open to get out of the room. This is a clear indication of negative pressure. Please refer to the installation instructions included in your manual and ask your suppliers for help if needed.

Proper airflow to the compressor is important for cooling and compression purposes. Ductwork can be utilized on the inlet and discharge of the compressor to bring in the cleanest and coolest air possible and to remove the hot air discharged from the compressor package. This excess exhaust heat can be used to heat part of the factory in the wintertime, or it can be discharged out of the factory in the summertime. If ductwork will be used, ensure it is sized by a professional HVAC company. They will consider the size and length of the ductwork. Typically, the inlet and discharge of the compressor is sized for the basic need of the unit being installed. Ductwork needs to be upsized so excess pressure drop is avoided, as overheating issues can occur if the compressor is "starved" for air. If the discharge ductwork has many bends or is long in length, a "booster" fan may be required. Sullair offers a high static fan option on most of its compressors so the customer may not need an additional "booster" fan in the ductwork and can avoid extra costs associated with the installation.

An air compressor is a significant investment for your facility. By following these tips and involving the experts early, you can help ensure your air compressor is properly installed. Plan ahead to make sure your system runs at optimal efficiency for years to come.



