



### ***Air Compressor Rental: Diesel or Electric***

If you are lucky enough to have a standby compressor in your facility, make sure the standby is in good working condition. Weekly test runs and a regular run rotation is a good idea. If you do not have sufficient standby, you will need to obtain a rental compressor and be prepared to install it quickly. Often, Thermo King Western Inc. can provide a rental air compressor on-site in less time than the plant can make arrangements to install it. Now is the time to consider the issue and prepare for it. Don't wait until the last minute when production losses are already mounting.

Your plant air piping should have an adequate shared connection point. For portable diesel air compressors this is normally a pipe to the outside of your facility ready for a hose connection which is valved off inside. Portable diesel units might not always have aftercoolers, so it may be a good idea to have one pre-installed on the emergency line. This, of course, is dependant on how important air quality is to your process. The portable also needs to be located near an area that fuel trucks will have access to. For an electrical rental, a tee fitting in the main supply line should suffice. It is important to also understand the availability of an electrical disconnect.

If you have not planned ahead, a diesel rental might be your only choice. However, with adequate planning you can take advantage of the cleaner, less expensive aspect of an electric rental. Electric rentals cost less to operate, require less maintenance, provide better quality air, and do not create a potential noise problem for neighbors.

### ***Maintenance Cost Factors***

A portable diesel unit will require the replacement of its engine oil, oil filter, fluid filter and compressor oil filter every 250 hours. The compressor oil will be replaced every 1,000 hours. In a 24/7 facility, major maintenance is required every ten days! Not only is the maintenance expensive, but production will need to go down as a result. An electric rental only needs minor maintenance every 2,000 hours (or three months) in a 24/7 facility.





Another important factor to consider is an electric motor has no diesel fuel to source, store or replenish. There are no hazardous fuel spills and no offensive exhaust fumes. An around-the-clock operating facility will need to refuel a diesel unit three times a day. At \$3.50 a gallon, this can be an expensive.

### ***Better Air Quality***

Electric rotary screw units are usually equipped with an efficient air cooled aftercooler to remove the condensate. An aftercooler will remove approximately 60% of the moisture generated in the compression process. By comparison, portable diesel units are generally not aftercooled at all. This can be disastrous in most industrial plant air systems. As an example, a 400 cfm unit at 75°F ambient temperature and 75% RH can pump up to 2 gallons of water per hour into a compressed air system.

Electrical units also have an industrial quality coolant separation system with levels of only 2 to 3 PPM oil carryover to plant air systems. Portable diesel compressors have levels of 10 to 15 PPM - up to 5 times more!!

The electrical unit is clearly superior and a much more economical choice for industrial plant air rental applications.

For more information contact Thermo King Western Inc.

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