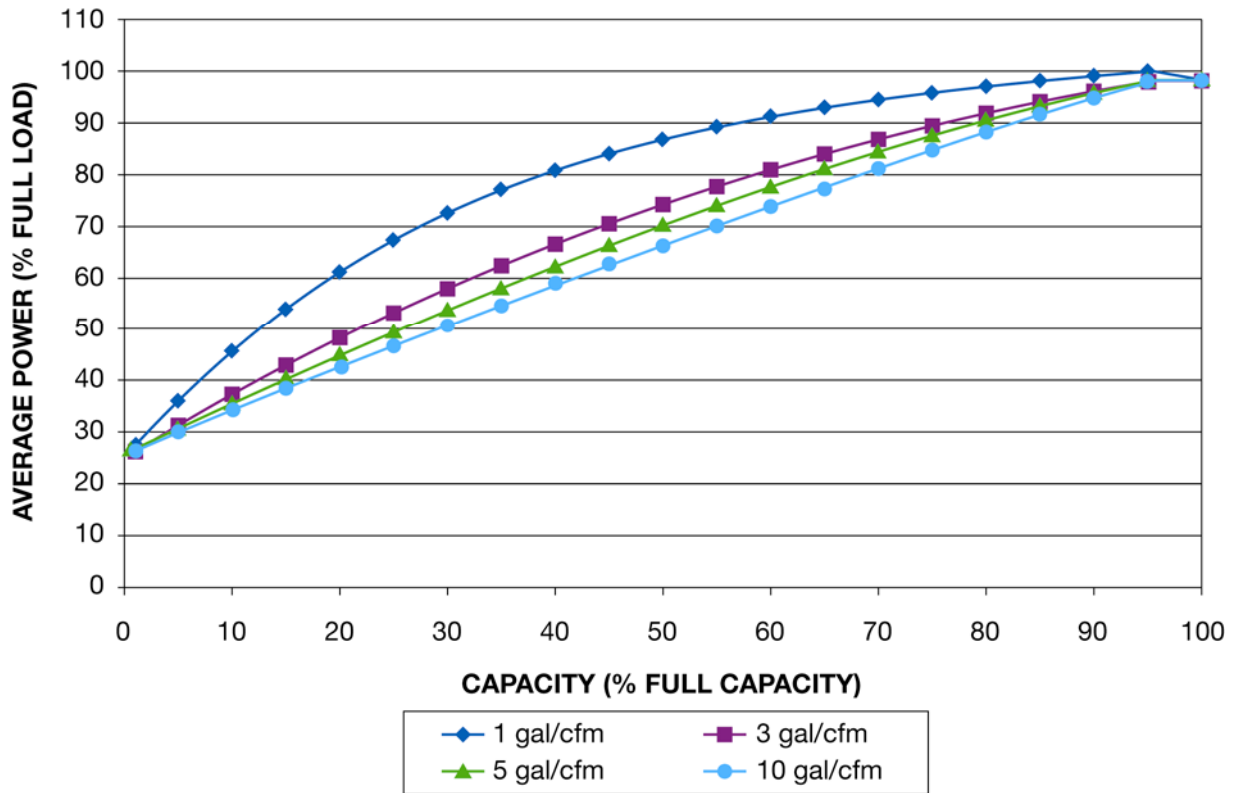


AVERAGE POWER VS. CAPACITY—LOAD/UNLOAD



In many cases, the system pressure will fall and the compressor will re-load before the fully unloaded power is realized. To overcome this, an adequately sized air receiver and/or system volume is essential. Taking the above factors into account, the figure above (Average Power vs. Capacity – Load/Unload Capacity Control) show the effect of different sizes of air receiver/system volume. It will be seen that some rules of thumb established many years ago for reciprocating air compressors are not adequate for an oil injected rotary screw compressor.

Note: The gal/cfm curves shown above are based on cfm of compressor capacity. Receiver size and location should take into account:

- The number of compressors;
- Their sizes, types, and controls; and
- The dynamic nature and variability of the demand.