

KEEPING YOUR OIL FLOODED Rotary Screw Air Compressors Healthy

By John Skalka



An air compressor is a lot like the human body. It requires routine upkeep and regular checkups to make sure it's functioning as it's supposed to.

For instance, while a heart pumps blood to keep the body functioning, an oil flooded rotary screw air compressor circulates lubricants to keep the machine operating. Without proper lubrication, the air end — the air compressor's heart — is threatened with high heat, higher energy costs, and lower efficiency. The coolers, plugs and separators become restricted, which could lead to an air compressor "heart attack."

To avoid such a catastrophe, Sullair recommends these

best practices for maintaining the longevity of your oil flooded rotary screw air compressor:

Oil Sampling: This is a commonly overlooked component of good air compressor maintenance. When it is performed regularly, users can monitor the condition of their fluid to see how it is holding up over time and take appropriate steps if symptoms arise (e.g. presence of wear metals). When it is not performed, a number of things can happen — all of them bad. Components can fail, machines can go down, and warranties can be voided. Though many users who regularly perform oil sampling do so to stay in compliance with their warranty, it's valuable for compressors of any age. **Electric Motor Greasing:** Users who think that electric motors are not prone to failure might be in for an unfortunate surprise. Every motor has greasing requirements, which are spelled out by the manufacturer. If you're diligent about proper greasing, you can keep contamination out, temperatures down and repairs manageable. If you're not diligent, you could be looking at catastrophic failure, which would cost you significant time and money.

Daily Logs: An ounce of prevention is worth a pound of cure. Daily equipment checks can ensure optimal operation, but some users might let months go by before a proper inspection. Staying on top of issues before they get too big can help avoid preventable downtime instances.

Condensate System Maintenance: Many users fail to perform this critical protocol, which should be part of the daily checklist. If the drain fails (which it is prone to do), water can make its way into the downstream process and damage sensitive equipment, or air can escape to reduce efficiency. With regular evaluation, proper function can be expected.

System Air Leak Audits: These can help you save on energy costs by preventing leaks and wasted compressed air. A quarter-inch air line leaking to 100 psi will cost thousands of dollars in a year, and reduce efficiency on a daily basis. Air leaks can be hard to hear in a noisy facility, but evaluation earlier in the day — when the facility is quieter — can make them easier to catch.



