MAXIMIZING COMPRESSOR PERFORMANCE:

THE CRITICAL ROLE OF GENUINE FILTERS AND LUBRICANTS PALPARTS













Compressed air generated by compressors is vital for many industrial processes and nearly indispensable across various sites. The most widely used technology to generate compressed air is the oil-injected rotary screw compressor, where intake air is compressed by the rotors of the air end. For this process to function effectively, the intake air must be free of dirt particles, and oil is mixed with the air to lubricate and cool the screws, creating an air-oil mix. The compressed air must be almost oil-free when it reaches the end user, meaning clean intake air and high-quality lubricants are essential for reliable compressor operation. Sullivan-Palatek's PalParts premium filters are specifically designed to meet these needs.

Like other production equipment, compressors must deliver high performance with low operating costs, and filters play a crucial role in ensuring this. The proper functioning of air filters, oil filters, and air-oil separators, all designed to work in harmony, significantly impacts energy consumption and the quality of compressed air. Sullivan-Palatek PalParts is the go-to choice for high-quality filtration systems that improve both efficiency and economy.





The first key component of this system is the air filter. The air filter blocks dirt and dust particles from entering the compressor, protecting the screws and bearings from unnecessary wear. Sullivan-Palatek PalParts air filters not only stop large particles but also trap smaller contaminants, reducing the load on downstream components like the air-oil separator and oil filter. With solutions for both portable and stationary compressors, Sullivan-Palatek's PalParts filter media offers excellent form stability throughout its service life. Innovative filter elements provide superior filtration and dirt-holding capacity while minimizing differential pressure, promoting cost-effective, energy-efficient operation.



In contrast, non-genuine filters often lack form stability and filtration performance, which can lead to system contamination and shortened compressor life. Inferior seals in non-genuine filters may cause leaks or fail to match the housing dimensions, leading to operational issues. To avoid these pitfalls, Sullivan-Palatek PalParts offers high-quality filters designed to ensure the smooth, reliable operation of your compressor system.

Next in the filtration system is the air-oil separator, which removes the majority of the oil from the compressed air. The separator works by using a cyclone effect to achieve the initial separation, followed by a coalescing process where smaller oil droplets combine and are removed. Sullivan-Palatek PalParts air-oil separators are crafted from fiberglass media tailored to meet specific requirements, offering high dirt-holding capacity, low differential pressure, and minimal residual oil content. This results in reliable, economical compressor performance. Non-genuine separators, however, may not handle pressure fluctuations or static charge buildup, leading to potential compressor failure or even fire hazards.





The third essential component of the filtration system is the oil filter. Clean oil is vital for cooling, lubricating, and sealing the screws. Sullivan-Palatek PalParts oil filters remove even the smallest particles and wear debris, protecting the compressor's internal components. Since compressor oil is more aggressive than engine oil, Sullivan-Palatek PalParts has innovative filter media that meet these stringent demands. Using non-genuine filters risks filter collapse, leading to unfiltered oil, wear on the screws and bearings, and possible compressor failure. Additionally, non-genuine filters often fail to maintain proper pressure stability or resist corrosion, further compromising the compressor's reliability.

In conclusion, the use of non-genuine filters can lead to higher long-term costs and greater risks, including equipment failure. Sullivan-Palatek PalParts filters, by contrast, provide exceptional energy efficiency, reliable compressed air generation, extended service life, and economical operation. For optimal performance, always use genuine Sullivan-Palatek PalParts filters and lubricants. Designed to extend oil change intervals and keep your machine running efficiently, even in demanding conditions, Sullivan-Palatek's PalParts ensure complete protection and longevity for your compressor.