

### OEM VS. NON-OEM REPLACEMENT PARTS: COST VS. HASSLE

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Keeping up with preventative maintenance is a critical part of sustaining an air compressor's efficiency and lifespan. By ensuring that everything works properly, potential issues can be identified before they cause serious and expensive problems. A properly maintained compressed air system can provide energy cost savings, decreased equipment downtime, and improved safety and durability.

With flooded rotary screw compressors, consumable parts such as air filters, oil filters, and air oil separators require periodic replacement to help prevent compressor downtime and ensure smooth operation. When it comes time to replace critical components, users may assume that any make part will work and may be tempted by the lower price of some components that are labeled, "will fit." However, original equipment manufacturer (OEM) parts are either the same parts originally included on the machine or are manufactured to be exact replacements for the original parts. OEM parts are specifically engineered to work in conjunction with the entire air compressor system to provide optimal performance -- they are guaranteed to fit and typically come with a manufacturer-backed warranty. While paying a lower price may be tempting, there are many reasons why you should choose OEM replacement components.

# Why invest in OEM air compressor replacement parts?

#### **Equipment Durability**

- OEMs use the latest engineering methods and optimal manufacturing processes to design parts
- The non-OEM parts are manufactured to look like OEM parts, but often are not made with same materials
- Non-OEM parts have a greater risk of failure as they were not designed specifically for the machine and are often less durable

#### **Stringent Quality Tests for Consistent Operation**

- Functionality of OEM parts is difficult to replicate
- OEM parts continually undergo rigorous quality standards
- OEM parts are put through endurance tests to guarantee performance throughout the life span of the part

#### Efficiency

- OEM parts are designed to provide peak performance, often for a longer period of time
- Using Non-OEM parts can easily interrupt runtime by requiring more frequent repairs

#### Safety of users

- OEM parts follow industry standard safety compliance processes to ensure security of manufacturing methods and environmental protection
- Non-OEM parts may not have been designed and tested specifically for your air compressor component failures could cause safety hazards in your operation

# OEM vs. 'will fit' oil filters by the numbers

To measure the efficacy of non-OEM aftermarket oil filters, a multi-pass test was performed in an ISO 16889 testing company filtration lab. Two different Sullair oil filter models were used for the comparison with the multi-pass test measuring the efficiency of both the OEM and 'will fit' oil filters. For the test, four different models of non-OEM aftermarket parts corresponding to each Sullair filter model were submitted to the testing company and compared with genuine Sullair OEM filters.

Per the ISO 16889 (multi-pass) test, standard test oil was circulated through the filter in a closed loop system multiple times while test dust was injected into the oil stream. Particle counts were recorded upstream and downstream of the filter; the counts were used to calculate the filter efficiency.

Based on the samples tested, the Sullair genuine oil filters measured higher in efficiency than the non-OEM aftermarket replacements. On average, one of the Sullair OEM models performed about 62% better than the non-OEM aftermarket oil filters while the other Sullair OEM model filter preformed 89% better than the non-OEM aftermarket oil filters. And, notably, the OEM Sullair filters were significantly better at filtering out small particles that, over time, can really impact a compressed air system.

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Particle	Sullair Oil Filters Competitive Analysis Particle size vs % efficiency values									
	Size	250025-525	1	2	3	4	250028-032	5	6	7
(micron)										
4	87.4	41.5	50.1	49.2	43.8	91.6	83.6	40.8	44.1	56.8
5	93.4	52.3	61.6	61	54	95.7	91.6	51.1	53.9	67
6	96.3	61.6	70.6	70.7	62.6	97.7	95.6	59.9	62.3	75.3
7	97.8	69.2	77.6	77.6	69.5	98.6	97.6	66.5	69.5	81.1
8	98.7	75.8	83.4	83.3	75.7	99.3	98.7	73.1	76	85.5
9	99.3	81.9	88.4	88.5	81.5	99.7	99.2	78.4	82.2	89
10	99.6	86.3	91.3	91.5	85.4	99.8	99.6	83.5	85.9	91.5
11	99.7	90	93.5	93.7	88.8	99.8	99.8	87	89.4	93.7
12	99.9	92.6	95.4	95.8	91.5	99.8	99.8	90.4	92	95.4
13	99.8	94.9	96.9	97	93.5	99.9	100	93.2	93.4	96.6
14	99.9	96.4	97.8	97.8	95	99.9	100	94.2	94.6	97.7
15	99.8	97.2	98.2	98.4	96	99.9	100	95.4	95.8	98.6
16	99.9	98	98.8	98.8	97.1	99.9	100	96.9	97	98.9
17	99.9	98.6	99.2	98.9	97.9	99.8	100	97.2	97.9	99.3
18	100	99.1	99.6	99.1	98.2	100	100	97.8	98	99.4
19	100	99.3	99.6	99.6	98.7	100	100	98.5	98.7	99.6
20	99.9	99.5	99.7	99.6	98.9	100	100	98.8	99.1	99.5
21	100	99.6	99.7	99.9	99.1	100	100	99.2	99.1	99.4
22	100	99.7	99.9	99.9	99.5	100	100	99.4	99	99.4
23	100	99.8	100	99.8	99.5	100	100	99.5	99.1	99.3
24	100	99.9	100	100	99.8	100	100	99.7	99.3	99.6
25	100	99.8	100	100	99.8	100	100	99.7	99.4	100
30	100	100	100	100	100	100	100	100	100	100
35	100	100	100	100	100	100	100	100	100	100
38	100	100	100	100	100	100	100	100	100	100
40	100	100	100	100	100	100	100	100	100	100





In conclusion, non-OEM parts are not designed specifically for the compressor – and are typically of lower quality – meaning they can often harm the compressor in the long run. Consider OEM parts as an investment in your business. Replacing worn out parts with OEM designed replacements will better protect your air compressor and help ensure its longevity – and efficiency.

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