

PRACTICAL ADVICE

Our products regularly undergo stringent quality control and only very seldom the malfunctioning of the compressor has to be ascribed to the filter itself.

Here below are listed some of the most common causes which lead on to an improper functioning of the machine.

Premature increase in pressure differential

This usually occurs when compressors work under the following conditions:

- a) Air intake filter and oil no longer efficient
- b) Unsuitable or heavily contaminated oil
- c) Water contamination-recognised by rust deposits in separator tank

To help in avoiding these problems, there should be frequent replacements of the Air and Oil filters and the oil should be changed completely at regular intervals. Check for deposits of 'varnish' which can quickly block a separator.

Compressor should not be run at excessively high temperatures.

Excessive use of oil

This normally occurs under the following circumstances:

- a) Separator not changed at the appropriate time. If the separator has reached the end of its lifespan or has worked in arduous conditions and is not replaced, it can suffer structural damage (collapse) or media breakdown causing oil carry-over.
- b) Blocked or malfunctioning scavenge tube. This situation increases the level of oil inside the separator and the amount of oil carry-over. To avoid this problem, the scavenge tube must be checked for correct length at every separator change and kept free from blockage.
- c) Incorrect oil level in tank. Overfilling with oil alters the pre-separation process and increases the quantity of oil in the air/oil mist thereby reducing the efficiency of the separator. "Foaming" created by the oil can also create this situation.
- d) Gaskets applied incorrectly or use of unsuitable or used gaskets. When installing a new separator the incorrect application of joints (bad seal) can cause heavy movements of oil thereby by-passing the separating system.
- e) Inefficient separation system. In some instances, the design of the compressor separation system is inefficient. In these cases the manufacturers improve the separation efficiency by adding baffles or through modification of separations by adding pre-separation media to the outside of the element.

Collapsed separator causes

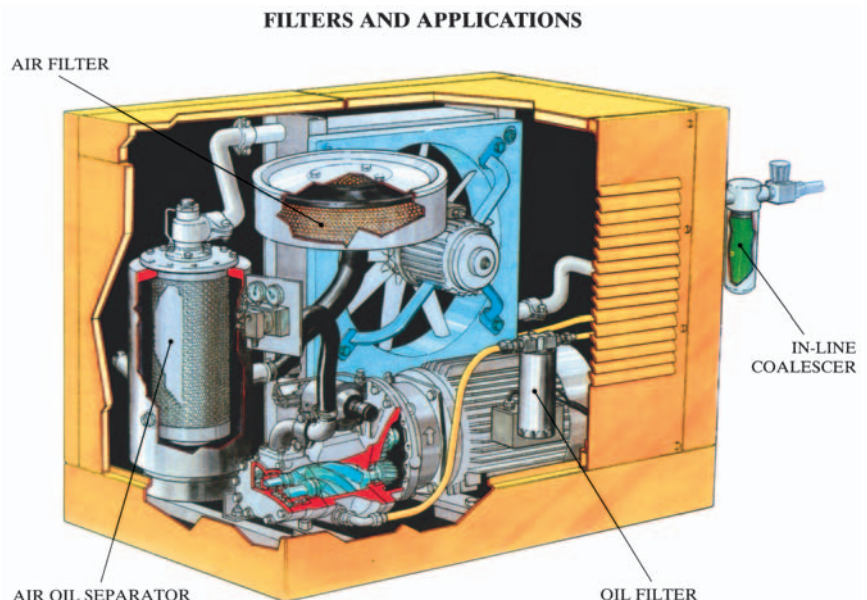
This normally occurs under the following circumstances:

- a) Separator excessively contaminated
- b) Sudden surges caused by:
 - malfunctioning valves
 - sudden release of air to atmosphere (mobile compressors)
- c) Rotary compressors working in parallel with reciprocating compressors without a suitable air receiver.

Flash fires

These are very rare and are caused by several factors occurring simultaneously and not directly related to the Air/Oil separator.

It is good practice to ensure that the gaskets have a reliable form of grounding by the use of suitable materials (at least one or two metal staples or metal foil) so that there is contact between the element and the separator tank.



SOTRAS

QUALITY CONTROL AND GUARANTEE

The efficiency of our separators is tried through Johnson or Balston tests as well as the use of artificial smoke. All types of filters are passed to our Quality control Department for approval before being marketed and the performance of every batch in terms of resistance to cyclical and maximum working pressure regularly undergoes stringent laboratory tests

We would like to emphasise that Sotras filters undergo stringent quality control and are frequently tested in order to ensure satisfactory operation in the application of which they are designed. Evidence of the high quality of our products lies in the fact that Sotras manufactures original equipment for some of the most important compressor manufacturers, to some of which Sotras guarantees product exclusivity.

We guarantee that filters produced by Sotras are free from defects either in materials or construction, always provided that the machinery is maintained in accordance with manufacturers' recommendations and filters are correctly installed and changed.

Sotras will replace any item found to be defective as described above but will not be held responsible for any other replacement or contingencies or consequential loss.

In addition Sotras manufacturing quality system has had approved certification to **UNI EN ISO 9002-94** since 1999.

In year 2003, Sotras has gained a new certification to **UNI EN ISO 9001-2000**.





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VIA DONATELLO, 13 - 10071 BORGARO TORINESE (TORINO) - ITALY
TEL. 0039.011.262.22.22 - FAX 0039.011.262.41.41
www.sotras.com
sales@sotras.com

