# **Compressors for Dummies**



(Updated 12-20-13)

# NOBODY READS MANUALS

Make this one the exception - - - you will be glad you did

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#### **Using the Tables of Content in PDF Format**

This book is generic in nature and applies to most high pressure breathing air compressors. Please notice the book has been completely re-formatted in chapters to facilitate finding your desired topic. Simply look at the chapter of your choice then click the page you want and you are there. At the top of every page there is a return link back to the contents page. Also there are links on some pages that will take you to another page with related topics or pictures. These pages may also have a link back to the page you were on. Otherwise go back to contents and click back to the page you were on. The key word search works very well as an **INDEX** – see p. <u>130</u> for "**How To**" instructions, also you can change your PDF setting to 200% or more to zoom in on any part of the book.

There is also an alphabetical index beginning on p. 166 & Pictures & charts index - 172

#### **Loss Prevention & Warranty Activation**

SCUBA diving, Fire Fighting, and the use of SCBA in an industrial setting are all activities that involve a high degree of risk. Proper operational and safety considerations can go a long way in the prevention of accidents. Some of the matters that you should consider (this is not intended to be an all-inclusive list) in a loss prevention program are:

- 1. **Air tests** It is prudent for any one supplying breathing air to perform frequent air testing by a reputable lab. See "Dew Point" p. <u>154</u>. The higher the test frequency, the more assured you could be that the air is safe for human consumption. In the event of a failed test, take corrective measures immediately and re-test. See "<u>Air Testing</u> p. <u>88</u>", "Oily Air" p. <u>104</u>
- 2. Record keeping This is such an important issue that a logbook template is on p. 42 with a "How To" introductory page on p. 41. Your hour meter is your most important tool p. 25. It is the owner's responsibility to make sure that entries are made regularly, accurately, and frequently. The technician's initials or signature allows responsibility to be pinpointed. Notations of preventative maintenance, air tests, and purifier cartridge changes prove that everything humanly possible is being done to ensure the highest quality breathing air is being produced. See p. 41 "Log Book Check List"
- 3. **Operator qualification** It should be mandatory that only trained operators be allowed to run and maintain the compressor. Periodic "in service" re-training is also a good idea, plus it maintains the professionalism of the entire operation for all to see. Stark Industries offers in depth training anywhere in the world.
- 4. **Cleanliness** p. <u>45</u> A compressor room that is well ventilated, roomy, neat, and as clean as hospital operating room presents an image more powerful than a million well phrased words. Many shops use the compressor room for storage of the most bizarre array of junk you can imagine. I have even seen wet suits lying on some compressors in dive shops. This type of activity creates the potential for accidents and is a clear indication of sloppy operating procedures.
- 5. Precautions against toxic gases Positive steps should be taken to ensure that the presence of paints, solvents, sprays, HTH, chlorine, pool chemicals, gas-fired heaters, engine exhaust, or other potential sources of <u>carbon monoxide</u> or other dangerous gases is not possible while the compressor is running. An operating procedure that includes these precautions should be placed conspicuously near the compressor controls. Competent, alert, conscientious operators are mandatory.
- 6. **Signs** In addition to "No Smoking" signs in the compressor room, additional signs should be placed where potential danger exists. For instance "No Parking", "No Painting", or "No Whatever" signs posted in or around the compressor room where appropriate.
- 7. **Compressor condition** A properly functioning compressor will not produce carbon monoxide. Make sure it stays clean and in top condition. Changes in inter-stage pressures are usually a precursor to a valve or cylinder malfunction. See the "Log Book Check List" p. 41. Keep the wiring neat and the electrical enclosure closed with appropriate warning signs attached. Also see p. 44 ventilation
- 8. **Safety consultant** Discuss these and other issues with your safety officer in order to achieve an environment that is most likely to prevent accidents.

My signature below acknowledges my commitment to read this manual in its entirety. A signed copy of
this page must be submitted to Stark Industries in order to activate my warranty. I realize that a thorough
knowledge of this equipment is my best assurance of achieving long-term reliable service and avoiding accidents. Log book maintenance is also a condition for keeping the warranty in effect.

Date

Printed Name

Customer Signature

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