



## **Recommended Procedure for Compressor Oil Change and Flushing**

Synthetic compressor lubricants are specifically formulated for the lubrication of all the different types of compressors, namely, rotary screw, rotary vane and reciprocating compressors. In order to maximize the value of these synthetic lubricants, certain procedures are recommended when changing over compressors which have been operating on other type of mineral oil lubricants.

All compressor components in contact with the synthetic oils should be cleaned of the previously used oil before changing over.

### **Step 1: Draining**

1. Drain all old oil from the unit for the normal oil change method. Drain the oil while the compressor is hot to ensure residue in the oil is drained out.
2. Open condensate drain valve and ensure all liquid is drained out.
3. Remove drain plug from the bottom of the separator/receiver and drain out all liquid.
4. Remove pipe and drain plug from bottom of oil cooler and completely drain.
5. Disconnect all oil pipe-work which could trap oil and drain completely.
6. Use high pressure air or nitrogen to blow thru the piping to remove as much residual oil as possible.
7. Change new filters and separator elements before filling new oil.



## Step 2: Flushing

If the compressor is clean and non-varnished, you can use the new compressor oil as the flushing oil.

1. Fill the compressor with the new compressor oil and run the machine as normal operation.
2. After 300hrs of operation, retrieve a sample of the lubricant and send to CPI Engineering Services for analysis.
3. If the oil analysis report states that residual oil is still in the system, please repeat step 1 again.
4. If the oil analysis report states that the oil is in a good condition, continue normal operation.
5. We recommend that oil sample should be collected every 4000hrs and send back to CPI Engineering Services for oil condition monitoring.

For varnished machines we recommend to clean the compressor with CP-COMP CLEAN II using the following procedure:

1. Fill the compressor with CP-COMP CLEAN II.
2. Run the CP-COMP CLEAN II for no longer than 500 hours.
3. After 300 hours, sample the lubricant and send to CPI Engineering Services for analysis.
4. It may take more than 1 charge of CP-COMP CLEAN II to properly clean the system.
5. The CP-COMP Clean II is not recommended to run longer than 500 hours.
6. Once oil analysis report states that the compressor is cleaned of varnish, drain out the CP-COMP Clean II
7. Replace the filters and separator elements and refill with new compressor oil.
8. Resume normal operation.
9. We recommend that oil sample should be collected every 4000hrs and send back to CPI Engineering Services for oil condition monitoring.

**Please note that CP-COMP Clean II is NOT suitable for ammonia system.**