

Pump Up Test Using the HDC2

PUMP UP TEST

Tank Volume **240.00 Gal**

Calculate

This test estimates SCFM.
Consult factory for best results

Discharge Pressure **650 PSI**

Start Pressure **585 PSI**

End Pressure **650 PSI**

Elapsed Time **46.2 Sec**

Calculated SCFM **184.1 SCFM**

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The Pump Up Test screen automatically calculates gas flow in SCFM. SCFM is a measure of gas flow based on standard pressure conditions. Since the transducers are configured for PSI the Start Pressure and End Pressure are only given in PSI for accuracy in calculations.

To calculate SCFM perform the following steps:

1. Enter the discharge tank volume in gallons.
2. Stop compressor System.
3. Close discharge tank outlet ball valve.
4. Release the pressure in the discharge tank to drop pressure approximately 80 – 100 PSI below the unload pressure.
5. Start the compressor system and go directly to the Pump Up Test Screen.
6. Press the Calculate button when the pressure is approximately 60 PSI below the Discharge Unload Pressure.
7. Wait for the discharge pressure to reach the unload pressure. The calculated value will be displayed.

NOTE
**THE PUMP UP TEST IS AN ESTIMATION OF FLOW. CONSULT THE
FACTORY FOR BEST RESULTS.**

Pump-Up Test Instructions (Manual)

The purpose of this test is to assist Hycomp evaluate the flow of the compressor.

Before performing the test record the size (gallons) of the receiver following the compressor and the current pressure of the receiver. Be sure that it is at least 20 psi less than full load pressure. (For example, if the pressure of the receiver is normally fully loaded at 340 psi, bleed the receiver down to a minimum of 320 psi.)

_____ Gallons _____ Beginning Receiver PSI

Isolate the discharge receiver from the downstream system by closing the ball valve on the receiver outlet. Do not close any valves on the inlet side of the receiver. Now we are ready for the pump-up test. This may take two individuals to perform, as you need to gather multiple information at the same time.

It is best to warm the compressor up to normal operating temp. Now to test, turn the compressor on, make sure that the compressor is loaded (amber light on the panel will come on) and start your timer (stop watch) to time the pump-up test. Note what the suction pressure is on booster compressors AND the discharge pressure of the compressor is **WHILE THE COMPRESSOR IS LOADED**.

_____ Suction pressure while the compressor is loaded at the beginning of the test.
_____ Discharge pressure while the compressor is loaded at the beginning of the test.
_____ psia or inches of Hg ambient air pressure for air compressors.

Watch the gauge to the receiver that you are filling up. Stop the timer (stop watch) when the receiver is pumped up 20 psi above the beginning of the test. For example, if you begin the test with the receiver pressure at 320 psi, stop the test when you reach 340 psi.

If the compressor becomes Unloaded during the test, stop the timer and note what the pressure gauge of the receiver shows.

Note what the Suction Pressure (on booster compressors) and the Discharge Pressure are at the conclusion of the test.

_____ Suction pressure while the compressor is loaded at the end of the test.
_____ Discharge pressure while the compressor is loaded at the end of the test.
_____ Final Receiver PSI
_____ Elapsed time of the test. Example: 1 minute 39 seconds.

This test should take a maximum of 10 minutes to perform. If you are approaching ten minutes, stop the test and record the above information.

You have now completed the test. We can use this information to calculate the flow of the compressor. Please fax this information to Hycomp, Inc. fax 435-563-3762.

Additional helpful information: _____ Hours on the machine. _____ Hours since last top end overhaul, i.e., rings and valve changeout.