

**Volume in a 60 gal. Tank @ 160 psi**

225/60R16 @ 35 psi: 21 tires\*  
 265/70R16 @ 35 psi: 11 tires\*  
 11R22.5 @ 105 psi: 1 tire\*

**Volume in a 80 gal. Tank @ 160 psi**

225/60R16 @ 35 psi: 28 tires\*  
 265/70R16 @ 35 psi: 15 tires\*  
 11R22.5 @ 105 psi: 1 tire\*

\* The volume is based on a tank pressure of 160 psi without any flow coming from the generator.

<u>Tire Size</u>	<u>Type</u>	<u>Volume (ft<sup>3</sup>)</u>	<u>PSI</u>	<u>Nitrogen Atmospheres</u>	<u>Nitrogen Volume (ft<sup>3</sup>) needed @ PSI</u>
225/60R16	Passenger Tire	1.32	35	2.38	3.14
265/70R16	SUV Tire	2.49	35	2.38	5.93
11R22.5	Truck Tire	3.89	105	7.14	27.79

These numbers are based on an atmospheric pressure of 14.7 psi (sea level).  
 Gauge pressure = 0 psi (sea level).

**SCFM:** standard cubic feet per min

**Volume:** cubic feet inside tire

**N2 Atmospheres:** Take the pressure (gauge pressure) inside the tire and divide by the atmospheric pressure  $35/14.7$  = amount of nitrogen required in atmospheres. (1 atmosphere = difference between absolute 0 and what it is around us. 14.7 at sea level. Decreases as altitude increases.)

**Nitrogen Volume:** Volume \* Atmospheres

**What is the capacity of the unit?**

Specifically, it depends on the tire size and the inflation pressure. For example:

<u>TIRE SIZE</u>	<u>PSI</u>	<u>TIRES PER HOUR</u>	<u>TIRES PER HOUR</u>		
		<u>Per SCFM</u>	<u>NA4-60</u>	<u>NA7-80</u>	<u>NA14-80</u>
225/60R16	35	19	82	135	270
265/70R16	35	10	43	71	142
11R22.5	105	2	9	15	30

In the real world, these figures will vary from realistic averages and do not take into consideration flow drops, labor time, etc.

<u>MODEL</u>	<u>AIR INPUT</u>	<u>N2 OUTPUT</u>
NA4-60	8.4 scfm	4.3 scfm
NA7-80	13.8 scfm	7.1 scfm
NA14-80	27.6 scfm	14.2 scfm

This is based on 160 psi input pressure at 75°F.

All calculations are based on a nitrogen purity level of 95%.

A 240 gal. tank has the capacity to inflate 3-5 average commercial truck tires.