Nitrogen Tire Filling Systems

Providing you with the best solution for offering nitrogen tire filling! Increase profits and vehicle count. Show your customers that you are on the forefront of automotive technology and safety with twice the productivity per vehicle. Why choose anything else?

Provide your customers with
- Proper Inflation 3-4 Times Longer
- Increased Safety
- Superior Handling
- Improved Fuel Economy
- Longer Tire Life
- Decreased Wheel Corrosion
Offers the Complete Nitrogen Tire Filling Package

High Purity Nitrogen Production and Delivery System
• Generates nitrogen on-demand using shop air source
• On-board tank for storage of generated nitrogen
• Eliminates need to purchase nitrogen
• Innovative membrane for optimal purity and long life
• Triple filtration system for additional purity and membrane longevity
• Auto-shutoff for less compressor use and greater energy savings
• Portable design with nitrogen inflated tires and front lockable casters
• Easy operation for increased productivity (NTF-15 Models)

Exclusive RTI Tire Deflation and Vacuum System
• Deflators quickly and simultaneously deflate four tires to atmospheric pressure
• Vacuum System removes more residual air than traditional nitrogen systems
• Removes more detrimental moisture
• Increases speed of service—twice as fast as double deflate/double inflate systems!
• Better purity in the tire!

RTI NitroPro N₂ Purity Tester
• Convenient and reliable hand-held device
• Quickly and accurately tests nitrogen tank purity
• Quickly and accurately tests tire purity
• Provides your customers with a professional display, validating your service

Contact RTI to see what model is perfect for you!

NTF-15 P/N 455-80009-00
NTF-15 Plus (New Product—Call For Availability) P/N 455-80010-00
NTF-60 P/N 455-80004-00
NTF-60 Plus P/N 455-80006-00
Air Regulator Kit P/N 355-80070-00
Premium N₂ Valve Stem Caps (Qty. 200) P/N 436075
Point-of-Purchase Flyers (Qty. 1,000) P/N 944005
NitroPro N₂ Purity Tester P/N 436050
NitroPro Hose Reel P/N 436125

NitroPro includes 20 samples of Premium Chrome N₂ Valve Stem Caps, Tire Deflators, Point-of-Purchase Flyers and a Bay Banner!

Specifications
Air Supply 100 to 150 psi (6.9 to 10.3 bar) required
Controls 2 Ball valves (with an intuitive silkscreen)
Vacuum Venturi generator (17 InHg max)
Service Time NTF-15: 7 minutes average (per vehicle) NTF-15 Plus: 7 minutes average (average tire size**) NTF-60: 7 minutes average NTF-60 Plus: 7 minutes average
Tires per hour* NTF-15: 32 tires NTF-15 Plus: 77 tires NTF-60: 36 tires NTF-60 Plus: 87 tires
Storage Tank Capacity NTF-15 & NTF-15 Plus: 15 gal (56.8 ltr) NTF-60 & NTF-60 Plus: 60 gal (227 ltr)
Nitrogen Purity Level Minimum 95 to 98% (from membrane)
Hose Coiled Green Air Hose (18 ft working length) (5.5 m)
Dimensions NTF-15 & NTF-15 Plus: 49 cm x 20 cm x 22 cm (125 cm x 51 cm x 56 cm) (H x W x D) NTF-60 & NTF-60 Plus: 52 cm x 20 cm x 27.5 cm (132 cm x 51 cm x 70 cm) (H x W x D)
Weight NTF-15 & NTF-15 Plus: 155 lb (70 kg) NTF-60 & NTF-60 Plus: 220 lb (100 kg)

* Maximum tires per hour, including tank refill.
** Average tire size for data: 225/60/R15. All models can service more small tires per hour and fewer large tires per hour than specifications listed.
Why is the industry switching to nitrogen?

How nitrogen works and what it does

Nitrogen (N₂) makes up the majority of the air that we breathe and is contained in the protein of all life on earth. It is colorless, tasteless, and non-toxic. The next most common component of air is oxygen (O₂). Together N₂ and O₂ make up approximately 99% of the air we breathe and traditionally fill tires with.

N₂ is a larger molecule than O₂. Therefore, it cannot escape as easily as oxygen through porous material such as a rubber tire wall (carcass). Leaking at a much slower rate than oxygen, a tire filled with N₂ maintains its proper pressure roughly three to four times longer than air-filled tires. Proper inflation provides better fuel economy, superior handling, longer tire life, and increased safety by reducing the likelihood of low pressure related loss of control, blowouts and other tire failures.

N₂ is a dry, inert gas. O₂ in a tire provides unwanted oxidation. Over time, this reaction destroys the tire carcass and corrodes wheels. A tire is prematurely aged by O₂ from the inside-out as the pressurized air in the tire makes the O₂ try to escape through the tire carcass, speeding up the damaging oxidation process. N₂ on the other hand, is a harmless inert gas that does not react negatively with tires and wheels. N₂ filled tires also reduce tire heat, thereby decreasing rolling resistance and increasing fuel economy.

N₂ is non-flammable. O₂ is a flammable gas while N₂ is an extinguishing gas. Thus, a large number of mass transportation companies around the world fill their tires with N₂ for added fire and explosion safety. In a vehicle fire, ruptured air-filled tires fuel the fire. N₂ filled tires slow the fire.

Nitrogen inflated tires are safer and longer lasting than tires inflated with air

- Nitrogen inflated tires do not age as quickly as air inflated tires
- Nitrogen inflated tires minimize blowouts
- Nitrogen inflated tires improve vehicle handling through proper inflation
- Nitrogen is an inert, non-combustible and non-flammable gas
- Nitrogen is a stable gas providing more constant pressure
- Nitrogen is a dry gas with no corrosive properties as found in compressed air

Correct inflation versus under-inflation

Correct inflation is highly significant when considering tire life and performance. It is not always possible to look at a tire and detect under-inflation. However, under-inflation can cause many tire-related problems. As inflation pressure largely determines a tire’s load capacity, under-inflation results in an overloaded tire. An under-inflated tire operates at high deflection resulting in decreased fuel economy, sluggish handling and may result in excessive mechanical flexing and heat build up, leading to catastrophic tire failure.

Facts & Testimonials

“It is environmentally safe.
—Bob Ulrich, Modern Tire Dealer, July, 2004

TMC (Technology & Maintenance Council of American Trucking Association) says that about 90% of tire failures causing tire road debris is caused by underinflation.
—TMC Tire Air Pressure Study, May, 2002

Bridgestone says air inflated tires lost an average of 2.7 psi per month and nitrogen inflated tires lost an average of 0.7 psi per month.
—Guy Walenga, Clemson Tire Conference, March, 2004

Michelin Supports the use of nitrogen based on its ability to better retain pressure over a period of time.

“Goodyear says 15% under-inflation equals 8% less tread mileage and 2.5% decrease in fuel economy.”
—Goodyear Radial Truck Tire and Retread Service Manual, Page 40

“Having tires inflated to the maximum recommended pressure can improve gas mileage by as much as 6 percent.”

Pirelli says 20% under-inflation equals 15% shorter tire life.
—Goodyear Radial Truck Tire and Retread Service Manual, Page 40

United States Department of Energy says the United States loses over 2 million gallons of fuel each day due to under-inflation.
See how **NitroPro** stacks up to other brands!

<table>
<thead>
<tr>
<th>Manufacturer Feature</th>
<th>RTI Technologies</th>
<th>Brand X</th>
<th>Brand Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portability</td>
<td>Yes (NTF-15 models) Greater productivity.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Vacuum</td>
<td>Yes – removes more air and moisture plus speeds service time and increases N₂ purity.</td>
<td>No – more moisture and residual air left in tire—lower N₂ purity in tire.</td>
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</tr>
<tr>
<td>Deflation Tool</td>
<td>Yes – Simply screw onto valve stem and deflate tires</td>
<td>No – Removal of valve core required, making it susceptible to damage or loss</td>
<td>No – Removal of valve core required, making it susceptible to damage or loss</td>
</tr>
<tr>
<td>Service Procedure</td>
<td>Exclusive Three-Step Service: Deflate tire, vacuum tire and inflate tire to desired pressure. <strong>FASTER AND MORE PROFITABLE SERVICE!!!</strong></td>
<td>MULTIPLE steps required: 1st – Deflate tire; 2nd – Inflate tire; 3rd – Deflate tire, 4th – Inflate tire. <strong>NOTE:</strong> ADDITIONAL SCFM and technician time required</td>
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<tr>
<td>Typical Service Time</td>
<td>7 minutes, 15 seconds</td>
<td>13 minutes, 30 seconds</td>
<td>13 minutes, 25 seconds</td>
</tr>
<tr>
<td>Effective SCFM***</td>
<td>2.1 SCFM or 5.1 SCFM</td>
<td>1.13 SCFM (advertised as 2.25 SCFM)</td>
<td>2.0 SCFM (advertised as 4.0 SCFM)</td>
</tr>
<tr>
<td>Assembly</td>
<td>No assembly required – Easy out-of-the-box operation</td>
<td>Assembly required prior to use</td>
<td>Assembly required prior to use</td>
</tr>
<tr>
<td>Filtration</td>
<td>Triple filtration system for additional purity and membrane longevity. Easy visual access to filter change indicator</td>
<td>Mini filtration system. No visual indicator to ensure proper maintenance of filtration</td>
<td>Visual indicator hard to see resulting in filter maintenance easily overlooked</td>
</tr>
<tr>
<td>Fill Hose</td>
<td>Coiled green air hose (18 ft. working length) with durable fill handle and built in gauge. Pressure/Vacuum</td>
<td>Fill hose and inflation gun not included with unit</td>
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</tr>
<tr>
<td>Operation Manual</td>
<td>Included with unit and also available on RTI website. Clearly defines the process, how to perform deflation/inflation procedure, unit components and filter maintenance information</td>
<td>Not Included – Operation manual specifying the deflation/inflation process is not included with unit</td>
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</tr>
<tr>
<td>Auto Shut-Off</td>
<td>Preset at 120 psi</td>
<td>No – without an auto shut-off the compressor could run continuously and result in compressor failures</td>
<td>Preset at 125 psi</td>
</tr>
<tr>
<td>N₂ Purity Analyzer</td>
<td>Hand held device included with unit. Quickly and easily test the tank and tire purity. Purity port conveniently located on the control panel for easy access.</td>
<td>No – Purity analyzer not included. No built-in port so no way of checking purity of nitrogen being generated.</td>
<td>Analyzer is built in to the unit. Unable to verify nitrogen purity levels in vehicle tires. Weekly manual calibration required.</td>
</tr>
<tr>
<td>Valve Stem Caps</td>
<td>20 high quality chrome samples included with unit. Identifies nitrogen filled tires.</td>
<td>Not Included</td>
<td>Not Included</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Easy filter change required once per year or when indicator reaches the end of indicator bar. Visual indication and filter maintenance program aid in providing the most complete warranty. Filter maintenance can be completed by user with no outside service required.</td>
<td>Semi-annually - twice a year. No visual indication on filters so semi-annually may not be sufficient for quality nitrogen results. Requires authorized manufacturer’s technician to service carbon absorber.</td>
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</tr>
<tr>
<td>Technical Support</td>
<td>Lifetime toll-free technical support to assist you with technical questions and troubleshooting. Website support also. No lemon guarantee.</td>
<td>No website support or technical data on website. Requires user to contact service rep or make a technical service call.</td>
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</table>

### RTI NitroPro vs. Bottled Nitrogen

- **Profitability**
  - Bottled nitrogen – approximately $0.50 per tire = $2.00 per vehicle
  - 5 vehicles per day then about $3,000 greater profit with NitroPro!

- **Productivity**
  - Bottled nitrogen – unload, store, mount on cart, connect hoses, open valve, empty, disconnect hoses, dismount from cart, store, load. Shop Labor $$$.

- **Safety**
  - Bottled nitrogen – heavy, high pressure, tip-overs on unstable carts, risk of explosion due to shop accidents.

- **Supply**
  - Bottled nitrogen – If you run out, you can’t offer the service. NitroPro – If you have shop air, you have nitrogen!

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**Extensive Warranties** • **No Lemon Guarantee** • **Made in the USA** • **Every RTI Unit is Run-Tested** • **Lifetime Toll-Free Technical Service** • **Free Professional Set-Up and Training** • **Choice of World’s Largest Service Chains**

[1-800-468-2321] • Visit our web site: [www.rtitech.com](http://www.rtitech.com)

**Equipment for the most productive mechanics in the world.**