The Potter AquaN₂ Kit is designed to quickly and effectively purge oxygenated air from a wet fire protection system and replace it with high purity nitrogen gas. Reducing the oxygen levels in wet fire protection systems is essential in protecting the system from the effects of oxygen related corrosion often found at the air water interface in the fire sprinkler piping.

**How it works**

Using the AquaN₂ Kit, which includes the Nitrogen Injection Manifold (NIM) and the Quick X-Haust Manifold (QXM), in combination with a Potter Automatic Air Release (PAAR-B) or Potter Air Vent (PAV) and a nitrogen source, can easily remove up to 99.9% of oxygen from a wet system.

By removing as much air as possible, the fire sprinkler system will have increased performance, eliminating delayed activation or cyclic activation of vane type waterflow detectors.

**Typical AquaN₂ Installation**

✅ Quickly removes oxygen from wet pipe systems

✅ Extends life expectancy of sprinkler system by 2.8X

✅ Lowers sprinkler maintenance costs

✅ Only UL listed and FM approved Air Vents for fire sprinkler systems

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**Ordering Information**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part #</th>
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<tbody>
<tr>
<td>AquaN₂ Kit</td>
<td>Nitrogen Injection Manifold and Quick X-Haust Manifold</td>
<td>1119500</td>
</tr>
<tr>
<td>PAV</td>
<td>Potter Air Vent</td>
<td>1119720</td>
</tr>
<tr>
<td>PAAR-B</td>
<td>Potter Automatic Air Release with Secondary Shut-off Valve</td>
<td>1030001</td>
</tr>
<tr>
<td>NCPR</td>
<td>Nitrogen Cylinder Pressure Regulator with Hose</td>
<td>1119501</td>
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<tr>
<td>NGP-PSN2</td>
<td>Potter Nitrogen Analyzer</td>
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</tr>
<tr>
<td>VSR-AT</td>
<td>Automatic Test Flow Switch</td>
<td>-</td>
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Please contact Potter for specific pipe size ordering information for the VSR-AT.
Engineering Specifications

FIRE SPRINKLER SYSTEMS, CORROSION MITIGATION PROGRAM, WET FIRE SPRINKLER SYSTEM

A. CORROSION MITIGATION PROGRAM

1) Potter AquaN2 Wet Inerting System –

Furnish and install a Potter AquaN2 Wet Inerting System at each wet fire sprinkler system stipulated in the drawings and installed per manufacturer’s instructions.

The Potter AquaN2 Wet Inerting System shall remove up to 98% or greater of the oxygen in the wet fire sprinkler system.

The Potter AquaN2 System shall include: Nitrogen Injection Manifold (NIM), Quick X-Haust Manifold (QXM), Potter Automatic Air Release Valve (PAAR-B) and 98% or greater concentration nitrogen source.

• The Nitrogen Injection Manifold shall be installed at the fire sprinkler riser. The Nitrogen Injection Manifold shall have a ball valve UL listed/FM approved for fire sprinkler systems, a ¼” quick-disconnect plug, and a pressure relief valve set at 50 PSI.

• The Quick X-Haust Manifold shall be installed at the end point on the fire sprinkler system. The Quick X-Haust Manifold shall have a ball valve UL listed/FM approved for fire sprinkler systems and a ½” muffled orifice for purging.

• The Potter Automatic Air Release Valve (PAAR-B) shall be installed on fire sprinkler system at the high point most remote from the riser determined by the sprinkler system designer or engineer to assure evacuation of nitrogen from the system during and after filling. The automatic air release valve shall be UL listed and FM approve for fire sprinkler systems. The automatic air release valve shall consist of a 40 mesh “Y” type strainer connected to an automatic air vent valve and all components shall be brass. The automatic air release valve shall be mounted in a vertical position and shall require a minimum of 8” of clearance above the fire sprinkler main or branch line piping.

• The nitrogen source shall be either nitrogen cylinders with Industrial Grade Nitrogen or from a nitrogen generator capable of producing 98% or greater nitrogen.

2) Potter AutoTest Flowswitch with Electronic Retard (VSR-AT) –

Furnish and install an AutoTest Flowswitch with Electronic Retard (VSR-AT) at each fire sprinkler system connection to the wet pipe main where indicated on the drawings and plans and as required by applicable local and national codes and standards.

The electronic retard shall contain a motor and software that allow the flow switch to be tested without discharging water out of the system. The test shall ensure that water is in the pipe as well as ensure the integrity of the paddle and trip stem assembly. The test is initiated by a separate test switch developed specifically for the flow switch. The flowswitch assembly shall be UL Listed and FM Approved.

3) Potter Corrosion Monitoring Station (PCMS-RM) and Corrosion Monitoring Probe (PCMPK) –

Furnish and install a PCMS-RM Corrosion Monitoring Station with a Monitoring Probe Kit (PCMPK) for each fire sprinkler system. Install per manufacturer’s instructions. The fire sprinkler contractor shall confirm the PCMK Corrosion Monitoring Probe that has been installed in the PCMS-RM Corrosion Monitoring Station and has been wired to the monitoring system specified.

Corrosion monitoring station shall be suitable for use on systems up to 250 PSI and have a minimum of 3 welded outlets for the installation of corrosion coupons or corrosion monitoring probes.