Keep Your Fleet Up and Running With Our Easy-to-Use Mobile Hydrogen Fueler Services

At Air Products, we are committed to helping you realize the benefits of hydrogen vehicles.

An excellent example is our flexible Hydrogen Fueler Services for fast-fill vehicle fueling with zero emissions and no utility hook-up requirements. We can provide service to you where you want it and when you need it for small fleet fueling. It is especially advantageous for meeting your fueling challenges for early testing and demonstration of fuel cell vehicles by providing a highly reliable, cost-effective, automated capability at the convenience of your location.

Air Products’ Fueler sits on a wheeled trailer that can easily be relocated for off-site events, including promotional demonstrations and remote endurance testing.

We also offer fueling stations with on-site hydrogen generation or storage.

How Our Service Works

Air Products can do everything but fill your fleet.

We lease fleets of Hydrogen Fuelers in strategic geographic areas under contract to vehicle developers and fleet users. Once a unit has been placed at your fueling location, Air Products will remotely monitor (wireless telemetry) its fuel level and replace or exchange it for a full unit when the hydrogen storage quantity is reduced to a certain level. We also provide maintenance for Fuelers and ancillary equipment.

All dispensing equipment is self-contained; the fill procedure is fully automated. We provide everything you need to fill your vehicles since no utility hook-ups are required. In addition, we can train your people to safely use the Fueler.

We coordinate the short duration exchange to coincide with the fuel usage of your vehicles.

Each unit will fuel a five-vehicle (5 kg) fleet for up to three weeks without swapping (actual usable storage depends on specific factors).

How You Benefit

Based on our extensive experience as the world’s leading producer and supplier of hydrogen and our long-standing support of and contributions to the evolution of fuel cell technology, we have designed our Hydrogen Fueler Services to give you unmatched benefits:

• Highly reliable vehicle fueling
• Automated dispensing
• No facility maintenance
• Remote monitoring to provide 24/7 availability
• Totally self-contained units
  – No site installation
  – No utility hook-up
  – No compression
  – Easy relocation
• Consecutive fast-fills limited only by storage volume
• Zero emissions
• Quiet operation
• Safe, compact design
• DOT and SAE code-compliant

Because the Hydrogen Fueler is storage of hydrogen generated at an external source, there is no fixed capacity that will potentially limit the number of vehicles you can fill. As your hydrogen fleet grows, swaps are available more frequently until you are ready to add Fuelers or a more permanent fueling facility.
### Table 1: Dispenser Features

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Interface</td>
<td>SAE J2600-Compliant, Drive-away/Breakaway Protection</td>
</tr>
<tr>
<td>Wireless Telemetry</td>
<td>Standard</td>
</tr>
<tr>
<td>Vehicle Communications</td>
<td>Per California Fuel Cell Partnership I/O Standard Revision 7</td>
</tr>
<tr>
<td>Fill Method</td>
<td>PLC Automated Cascade</td>
</tr>
<tr>
<td>User Interface</td>
<td>Controlled Personnel Access</td>
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<tr>
<td>Fuel Measurement</td>
<td>Optional Capabilities</td>
</tr>
</tbody>
</table>

### Table 2: Fueler Features

<table>
<thead>
<tr>
<th>Design Parameters</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total H₂ Capacity</td>
<td>60 kg to 150 kg</td>
</tr>
<tr>
<td>Usable H₂ Capacity</td>
<td>30 kg to 110 kg</td>
</tr>
<tr>
<td>Dispensing Pressures</td>
<td>350 barg/Optional: 250 barg</td>
</tr>
<tr>
<td>Trailer Length</td>
<td>4.9 m to 8 m (16 feet to 26 feet)</td>
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<tr>
<td>Trailer Width</td>
<td>2.5 m (8 feet)</td>
</tr>
</tbody>
</table>

### Table 3: Site Requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Required</td>
<td>Bare level surface, concrete preferred</td>
</tr>
<tr>
<td>Utilities</td>
<td>None required</td>
</tr>
</tbody>
</table>

### For More Information
To learn more about our Hydrogen Fueler Service capabilities or to tell us more about your needs, contact your nearest office. Or visit our Web site at the URL below.

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### Safety: Our Number One Priority
Every day, care and safety are the first and final priorities in our work, from the individual actions of every Air Products employee to the operation of whole facilities in more than 30 countries. Our strong commitment to the American Chemistry Council’s (ACC) Responsible Care® initiative exemplifies the depth and breadth of the company’s award-winning safety programs.

When it comes to product quality, Air Products’ operating groups are registered to ISO 9000 standards in the majority of industrialized nations. Registration scopes cover sales, design, manufacture, operation, and maintenance of industrial gas plants and pipelines, cryogenic vessels, and distribution equipment, as well as the specifications of gas products.

### About Air Products
Air Products and Chemicals, Inc. is the world’s only combined gases and chemicals company and has annual revenues of nearly $6 billion and operations in 30 countries. The company distinguishes itself through its 17,000 employees around the world, who build lasting relationships with their customers and communities based on understanding, integrity, and passion.

For nearly 60 years, Air Products has been helping customers to reduce costs, increase productivity, and improve product quality through innovative industrial gas supply and applications technology. With 30 years of expertise in supplying hydrogen to NASA, we are on board for critical alliances with developers, vehicle manufacturers, and fleets to advance hydrogen power here on earth.

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