The Trifecta® X-Series is the preferred solution for reliable and continuous laser assist gases for delivery pressures up to 450 psig and flow rates up to 15,000 scfh. Drawing liquid from a standard bulk tank, the Trifecta system boosts the liquid pressure by alternately feeding two liquid cylinders equipped with innovative multi-function pressure building vaporizers. The Trifecta solution has no down-time and minimal losses when compared with other laser assist gas solutions. This convenient solution eliminates high-pressure pumps, compressors, cylinder cradles and surge tanks.

**PRODUCT HIGHLIGHTS**

- System utilizes standard low-pressure bulk tank to lower investment and use existing assets
- No downtime – system maintains pressure and flow when bulk tank is filled and eliminates excessive product losses associated with high-pressure bulk tanks
- Cylinders switch by pressure instead of level to further reduce product loss and protect against pressure decay
- Robust design features streamlined all stainless steel piping with only five control valves and one integrated electronic control system (PLC) for increased durability and reliability
- Computer-controlled design simplifies installation, start-up and continuous operation
- Frame assembly features a protective top cover in a compact footprint with an elevated base for improved ventilation
- Inconel and copper material used where required on high pressure oxygen unit
- Both models meet CGA guidelines for oxygen distribution systems
**System Requirements**
- 15 amp, 110 VAC power, dedicated circuit (230 VAC panel also available)
- Bulk storage tank with 50 psig minimum pressure
- External vaporizer, minimum 600 psig working pressure, sized for maximum flow rate
- Two piping connections to bulk storage tank (liquid withdrawal & low phase instrument line)
- High-flow pressure regulation

**Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>X15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>1374 mm</td>
</tr>
<tr>
<td>Width</td>
<td>1400 mm</td>
</tr>
<tr>
<td>Height</td>
<td>2440 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>815 kg</td>
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</tbody>
</table>

**Flow Rate**

<table>
<thead>
<tr>
<th>Service</th>
<th>MAWP (psig)</th>
<th>MAOP (psig)*</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOX</td>
<td>500</td>
<td>450</td>
<td>X15</td>
</tr>
</tbody>
</table>

*Maximum Allowable Operating Pressure

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**Schematic**

[Diagram of the equipment setup]

**Simulated Stainless Steel Plumbing with Protective Top Cover**

**Trifecta X-Series**

Laser Assist Gas Supply System for Oxygen Service

**Service**

- LOX

**LOX**

<table>
<thead>
<tr>
<th>X15</th>
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<tbody>
<tr>
<td>MAWP (psig)</td>
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<tr>
<td>500</td>
</tr>
</tbody>
</table>

*Maximum Allowable Operating Pressure

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**Regional and operational conditions will affect performance.**

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