Hydraulics International, Inc. (HII) gas booster is designed to boost gas directly from a cascade system, a gas generation system, a cryogenic system or a high pressure compressor to outlet pressures of 3450-psi (238-bar). The unit ensures full fills even if the supply storage pressure drops as low as 300-psi (20 bar). The unit may be Driven manually, by means of its integral hand pump assembly (optional); a low pressure conventional air compressor; or Regulated high-Pressure air storage supply (SCUBA, SCBA or NITROGEN bottles). Maximum 150psi (10 bar) air supply.

The high-pressure sections of the booster are cooled by the drive exhaust air and operate dry, non-lubricated. In the shop air drive mode, non-contaminated outlet gas is assured because of complete dual vented separation from the drive section.

**KEY BENEFITS:**

- Increase System Capacity: Up to 50% more fills
- Eliminate Cascading: Allows you to fill or top-off from storage as low as 300 psi (20 bar)

**KEY FEATURES:**

- Boost gas pressure from 300 psi to 3450 psi
- Hold Pressure. Can be controlled to stop at any predetermined pressure and hold that pressure indefinitely without consuming power, and restart under full load
- Intrinsically Safe. Compressed air reduces risk of heat, flame, spark, or electrical shock
- Contamination FREE. Separation between drive and gas section uses three static seals with dual vents

**OPTIONAL CONTROLS:**

- Manually Driven with Integral Hand Pump Assembly
  2000 psi (138 bar) MAX. outlet pressure
- High Pressure Air Controls
  (HP regulator, relief valve and on/off valve)
- Oxygen Fill Accessory Kit
  (inlet CGA connector, 60" inlet & outlet hoses, outlet filter, outlet on/off valve, gauge, and DIN connector with bleeder)
- Watertight Protective Case with Wheels
  22"L x 14"W x 9"H (559 mm x 356 mm x 229 mm)
- Safety Low & High Pressure Cutoff Valves
  (set to automatically stop & restart the booster)
- Outlet Pressure Relief Valve

**PERFORMANCE:**

Approximate fill-time* for a 19 cu-ft (0.54 cu- m) O₂ Bottle to 2,400-psi (165 bar)

<table>
<thead>
<tr>
<th>SYSTEM PRESSURE AFTER EQUALIZATION</th>
<th>APPROX. FILL-TIME</th>
<th>APPROX. FILL RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 psi (138 bar)</td>
<td>1.0 minutes</td>
<td>3.0 scfm (85 nl/min)</td>
</tr>
<tr>
<td>1500 psi (103 bar)</td>
<td>3.1 minutes</td>
<td>2.3 scfm (65 nl/min)</td>
</tr>
<tr>
<td>1000 psi (69 bar)</td>
<td>7.3 minutes</td>
<td>1.5 scfm (42 nl/min)</td>
</tr>
<tr>
<td>500 psi (34 bar)</td>
<td>20 minutes</td>
<td>0.8 scfm (23 nl/min)</td>
</tr>
</tbody>
</table>

*Based on 105-psi shop air and 60 cycles per minute. **NOTE:** DO NOT exceed 200 psi/min. transfer rate for pure oxygen and 50-70 psi/min. during mixing.
**SPECIFICATIONS:**

- **Dimensions:** 12.05" L x 4.9" D x 3.4" H
- **Weight:** 11.6-pounds (5.2 Kg)
- **Pressure Ratio:** 23:1
- **Maximum Outlet Pressure:** 3,450-psi (238 Bar)
- **Max/Min Drive Air Pressure:** 150/12-psi (10/0.8 Bar)
- **Air Drive:** 1/4" NPTF
- **Gas Inlet:** 3/8" Female JIC. (9/16" x 18 straight threads)
- **Gas Outlet:** 3/8" Female JIC. (9/16" x 18 straight threads)
- **Exhaust:** 1/4" NPTF
- **Remote Pilot:** 1/8" NPTF

**PERFORMANCE CURVE**

(Assume an air drive source of approximately 100 psi from 1/4" I.D. piping)

**DIMENSIONAL DATA**

**GAS OUTLET PRESSURE - PSI (bar)**

<table>
<thead>
<tr>
<th>PSI (bar)</th>
<th>(172)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2500</td>
<td></td>
</tr>
<tr>
<td>1875</td>
<td>(129)</td>
</tr>
<tr>
<td>1250</td>
<td>(86)</td>
</tr>
<tr>
<td>625</td>
<td>(43)</td>
</tr>
</tbody>
</table>

**GAS OUTLET FLOW - SCFM (NL/MIN)**

- **A:** 2 SCFM (57 NL/MIN)
- **B:** 4 SCFM (113 NL/MIN)
- **C:** 6 SCFM (170 NL/MIN)
- **D:** 9 SCFM (255 NL/MIN)

Dashed lines represent approximate air consumption:

- **A:** 2 SCFM
- **B:** 4 SCFM
- **C:** 6 SCFM
- **D:** 9 SCFM

**Other HII Quality Products: 100% USA Made**

- Booster mounted on a Watertight Protective Case
- Electric Driven Booster Packages
- 2-Bottle Hand Truck with Booster
- Portable Booster System with Safety Valves