

HIII AIR DRIVEN GAS BOOSTER MODEL 3G-SS-20

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.

> IDEAL FOR GENERAL AVIATION, MUNICIPAL FIRE, RESCUE, RECREATIONAL & TECHNICAL DIVERS, DIVE SHOPS, YACHTS AND RESCUE SERVICES

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- m³) O₂ Bottle to 2,400-psi (165 bar)

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

*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.

AIR DRIVEN GAS BOOSTER **MODEL 3G-SS-20**

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)

1/4" NPTF Air Drive:

• Gas Inlet: 3/8" Female JIC. (9/16" x 18 straight threads)

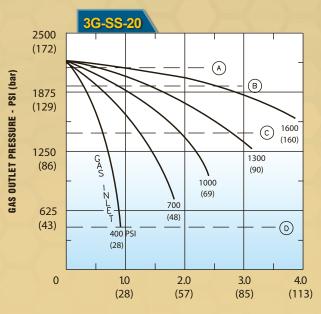
• Gas Outlet: 3/8" Female JIC. (9/16" x 18 straight threads)

1/4" NPTF Exhaust:

Remote Pilot: 1/8" NPTF

PERFORMANCE CURVE

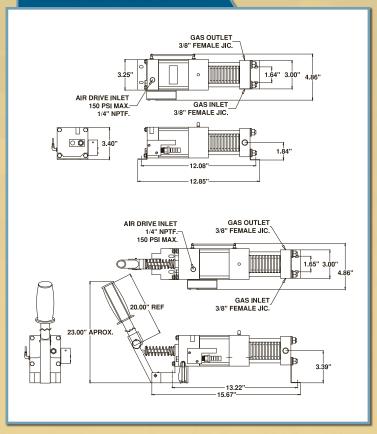
(Assume an air drive source of approximately 100 psi from 1/4" I.D. piping)



GAS OUTLET FLOW - SCFM (NL/MIN)

Dashed lines represent approximate air consumption: A: 2 SCFM B: 4 SCFM C:6 SCFM D: 9 SCFM (57 NL/MIN) (113 NL/MIN) (170 NL/MIN) (255 NL/MIN)

DIMENSIONAL DATA



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

