



AVA AERO

[www.avaet.com](http://www.avaet.com)

A trusted leader in Aviation & Hydraulic equipment trading. Committed to Quality, Safety & Exceptional customer service.



POWERING YOUR PERFORMANCE



## POWERING YOUR PERFORMANCE

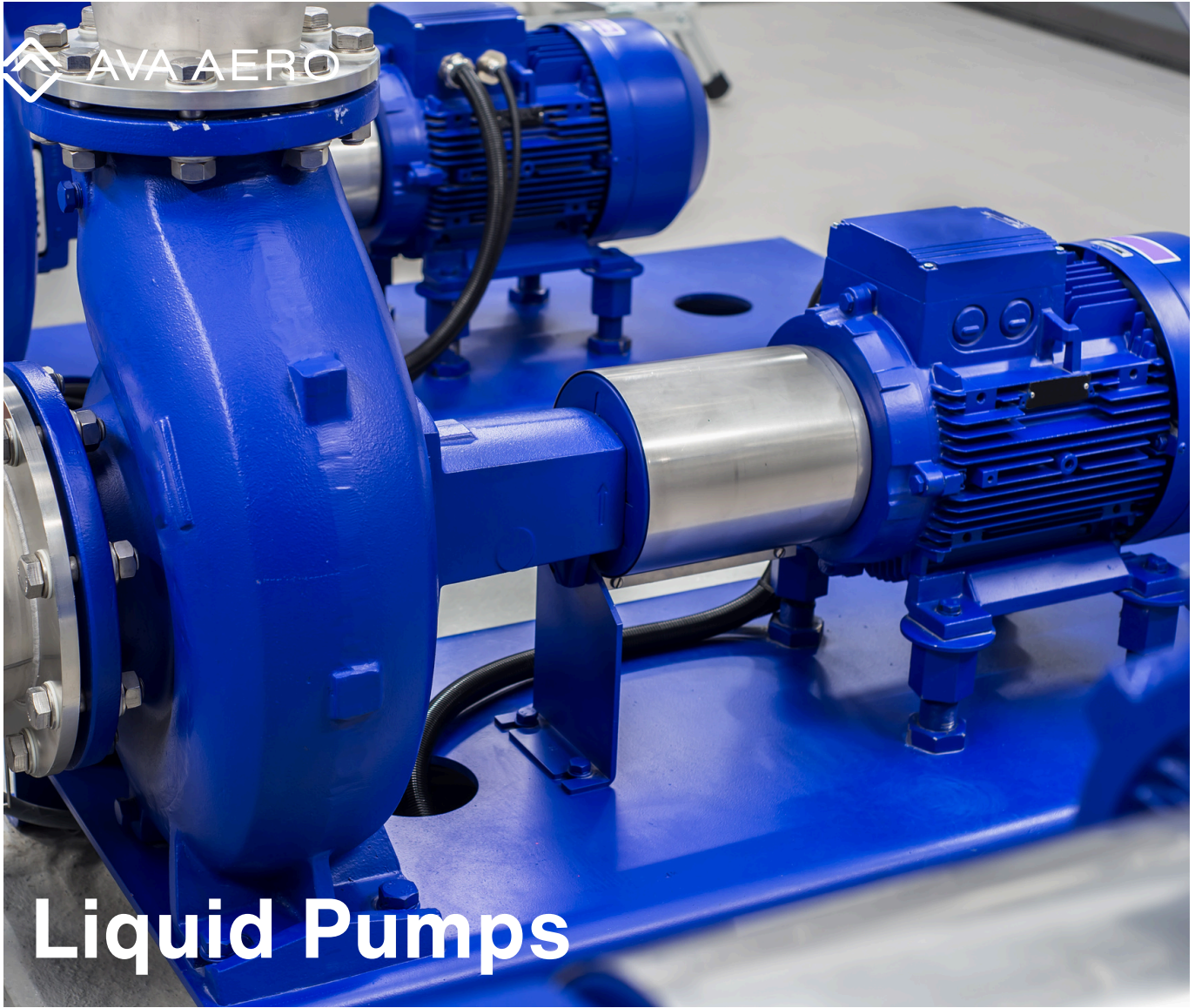
AVA AERO is the Exclusive Distributor of Hydraulics International Inc. (HII) in the Middle East. We provide High Quality Equipment and tools for different industries including Oil & Gas, Aviation, Airports, Mining and etc.

HII is recognized as a leading American manufacturer and supplier of air, electric, hydraulic, & manual driven high-pressure products to Automotive, Airline & Aerospace, CNG, Defense, Fire-Health & Safety, Fluid Power, Fuel Cell Hydrogen, General Manufacturing, Laboratory, University & Research, Mining, Oil & Gas, Paintball, Plastics, Power & Energy, Recreational Sports Diving, Electronics and other industries.

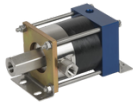
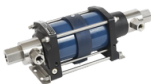

HII Products includes but not limited to :

- Pumps
- Boosters
- Air Amplifiers
- System Packages
- Hydraulic Test Units
- Hydraulic Power Units
- High Pressure Components including Valves & Gas Receivers




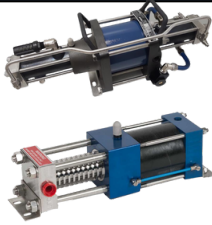




# Liquid Pumps

Drive Piston(s) (Diameter)	Area Ratios, (Drive vs Boost Piston(s))		Basic Description and Benefits
<b>3"</b>	8:1, 14:1, 25:1, 41:1, 81:1, 125:1, 220:1 Optional hand Pump Kit Available.		<p>The drive piston(s) is directly connected to the pump plunger or piston, separated by a high pressure seal. When shop air (or gas) is applied, the assembly reciprocates automatically, producing a positive displacement pumping action at the liquid end. This pumping action will stall and hold pressure whenever the system down stream is closed. The final pressure is estimated by multiplying drive air pressure x the area ratio of each model. Drive air or gas can range from 3 to 150 PSI.</p> <p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Start/stop/restart under full load. Hold maximum pressure indefinitely.</li> <li>• No electrical hazard in explosive or damp environments.</li> <li>• Rated for water, oils, solvents, and most liquefied gases to high pressure.</li> <li>• Simple maintenance.</li> <li>• Simple control in fluid power circuits.</li> </ul>
7 Models	Pressure to 22,500 PSI	7 lbs (Max)	
<b>5-3/4"</b>	4:1, 10:1, 15:1, *20:1, 30:1, *30:1, 45:1, 60:1, *60:1, *90:1, 115:1, 230:1, 300:1, *300:1, 410:1, 450:1, *600:1, **900:1 *Two Drive Pistons **Three Drive Pistons		
30 Models	Pressure to 80,000 PSI	30 lbs (Max)	
<b>7"</b>	7:1, *14:1, 35:1, 60:1, 100:1, *70:1, *120:1, *200:1 *Two Drive Pistons		
8 Models	Pressure to 22,500 PSI	85 lbs (Max)	



# Gas Boosters

Air or Gas Driven			
Drive Piston(s) (Diameter)	Area Ratios, (Drive vs Boost Piston(s))		Basic Description and Benefits
<b>3"</b>	**9:1, *23:1, **29:1 **Avaliable in 2 Stages & double acting configurations Optional Hand Pump Kit.		<p>The drive piston(s) is directly connected to the booster piston(s), separated by a vented, triple seal system. The reciprocating action is the same as the liquid pumps. However, with most models final pressure is a function of drive pressure (air driven models only), gas inlet pressure and staging so commonly an external pressure control is recommend.</p> <p><b>Typical Applications:</b></p> <ul style="list-style-type: none"> <li>• Bottled gas transfer.</li> <li>• High pressure gas testing.</li> <li>• Rebreather Fillings or topping off.</li> <li>• Gas injection - plastic forming or chemical</li> </ul> <p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Non lube dry gas pistons ensure hydrocarbon free gas output.</li> <li>• Safe with flammable gases or oxygen</li> </ul> <p><b>Type of Gas:</b> Nitrogen (N2), Breathing Air (N2O2), Helium (He), Nitrous Oxide (N2O), Carbon Dioxide (CO2), Neon (Ne), Argon (Ar), Sulphur Hexafluoride (SF6), Oxygen (O2), Carbon Monoxide (CO), Hydrogen (H2), Methane (CH4), Ethylene (C2H4), Natural Gas (CH4)</p>
3 Model	Pressure to 3,450 PSI	11 LBS (Max)	
<b>5-3-4"</b>	4:1, 7:1, *14:1, *28:1, 30:1, 50:1, *60:1, 75:1, 92:1, *100:1, *150:1 *Two Drive Pistons Note: also that 17 Different combinations of these ratios are available in standard 2 stage models		
38 Models	Pressure to 30,000 PSI (2069 BAR)	53 LBS (24 KG) Max	
<b>7"</b>	7:1 Available in 2 Stage & Double Acting Configuration		
2 Models	Pressure to 1,250 PSI	65 LBS (29.5 KG)	
<b>GAS BOOSTERS</b>	<b>Electric Driven</b>		
Horespower	Pressure Ratio		
<b>2</b>	7:1, 14:1, 30:1, 50:1, 92:1 Available in 2 stage and double acting configurations.		
14 Models	Pressure to 15,000 PSI (1034 BAR)	145 lbs (66 Kg) Max	

## COMPONENTS:

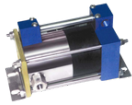


### High Pressure Valves

Type	Relief 4 Models	Pilot Cutoff 11 Models	Release/ Unloading 5 Models	Check 6 Models to 2" NPT	On/Off 2 Models
Pressure to	60,000 PSI	25,000	20,000 PSI	20,000 PSI	10,000 PSI
					

- Check valves - up to 20,000 PSI (1379 BAR), up to 2"
- Needle valves - straight or angled to 5,000 PSI (345 BAR)
- In-line filters rated to 5,000 PSI (345 BAR), 3 to 25 micron
- Double acting hand pumps - to 3,000 PSI (207 BAR)
- Pressure relief valves - to 60,000 PSI (4137 BAR)
- Gas Receivers (15 Models) Pressures to 20,000 PSI. Volumes to 900cu. inches



### Air Pressure Amplifiers:

Drive Piston(s) (Diameter)	Area Ratios, (Drive VS Boost Piston(s))		Basic Description and Benefits
<b>3"</b>	2.5:1, 4:1		<p>These units are simplified versions of Hill's gas booster design in that they are designed to boost (amplify) the pressure of the same gas (shop air) used for drive.</p> <p><b>Benefits:</b></p> <ul style="list-style-type: none"> <li>• Solve low air pressure problems at individual pneumatically actuate production machines</li> <li>• Provide higher test station air or nitrogen pressure economically.</li> </ul>
2 Models	Pressure to 675 PSI	7lbs (Max)	
<b>5-3/4"</b>	2:1, 5:1		
2 Models	Pressure to 1,250 PSI	36 lbs (Max)	
<b>7"</b>	8:01		
1 Model	Pressure to 1,250 PSI	45 lbs (MAX)	

## Packaged Systems

### Air Amplifier with 200 PSI Receiver

---

The air used for cycling exhausts through the muffler provided, or may be piped out of the area. The rest of the air is compressed to a higher pressure output. When output demand stops, the unit will stall in a force balanced condition consuming no power nor generating any heat. When output demand resumes, the unit automatically responds and cycles at the rate needed to meet that demand, up to the units capacity. Output Flow Reaches Maximum as the amplifier's output pressure approaches the plant air input pressure. Output Flow Drops to Zero as the unit reaches theoretical stall. This value is estimated by multiplying input pressure x the last digit of the model number, e.g. model 5A-DS-5 with 100 PSI (6.9 BAR) plant air input will stall at approximately 500 PSI, model 5A-DS-2 at approximately 200 PSI (13.8 BAR). In practice however, controlling the maximum pressure desired is usually done with an external control.



### Portable Hydrostatic Test Unit

---

Hydraulics International's portable hydrostatic power pack provide versatile service in all static, high pressure testing applications including but not limited to BOP Stacks, choke and kill lines, Christmas trees, valves, pipelines, hoses, cylinders, pressure vessels and components, valve actuation and any other type equipment requiring high-pressure static testing.

Self-contained, portable units consist of the basic stainless steel roll-bar frame and control panel with a high pressure air operated hydraulic pump, stainless steel reservoir, valves and chart recorder. The portable hydrostatic power packs may be provided in working pressure ranges from 100 to 45,000 PSI and are safely tested with its compact easy to operate control panel design.

# Packaged Systems



**High Pressure O2/N2 Dual Cylinder Hand Truck**

The High Pressure Gas Boosting Package is designed to boost directly from high pressure Nitrogen supply to cylinders to outlet pressure up to 4,500 PSI. The basic booster is an automatically reciprocating, single acting, single air drive configuration. It ensure full 3,000 - 4,500 PSI fills even if the supply storage cylinders drop as low as 350 PSI.

## High Pressure O2/N2 Portable Unit

Hydraulics International's Nitrogen/Oxygen booster package enable the full use of 2,500 PSI storage maximizing the volume of fluid at the site. It ensure full fills even if the storage cylinders drop as low as 500 PSI. The booster may be driven with a low pressure conventional air compressor, or optional "Boostertrap" directly from the High Pressure Storage supply.

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



## Other Packaged Systems

### Liquid Pump Packages



### Gas Booster Packages



### Air Pressure Amplifiers




Like you, we understand the importance of  
peace of mind.

That's why **AVA Aero Trading** offers reliable,  
durable products. "Powering your performance"  
is our motto, and we are committed to providing  
products from best-in-class manufacturers to  
ensure your operations run smoothly.



Address: #23,16th Floor  
Park Place Tower, Sheikh  
Zayed Road, Dubai, UAE

 +971 58 670 46

 44

[Sales@avaet.com](mailto:Sales@avaet.com)

