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Mexico Beach Marine

## **INDUSTRIAL AIR OPERATIONS**

We presently offer sales of new compressor systems and mobile repair services for customers in the Florida, Alabama, and Georgia, Tri-State area.

## HIGH-PRESSURE BREATHING-AIR SYSTEMS

#### SALES OR FACTORY AUTHORIZED WARRANTY SERVICE: BAUER NUVAIR **INGERSOLL-**ALKIN MAX-AIR HASKEL NITROX RAND **BOOSTERS** NUVAIR/NITROX **ALKIN W-31 MAX-AIR 35 HYPRESS AIR MEMBRANE** WE ALSO SERVICE OTHER BRANDS OF HIGH-PRESSURE BREATHING-AIR COMPRESSOR EAGLE MAKO WORTHINGTON DAVEY SALES/SERVICE: LOW PRESSURE INDUSTRIAL SYSTEMS

(LARGE STATIONARY COMPRESSORS OVER 60 GAL. CAPACITY) WE ALSO SERVICE ALL OTHER BRANDS OF LOW-PRESSURE COMPRESSORS:





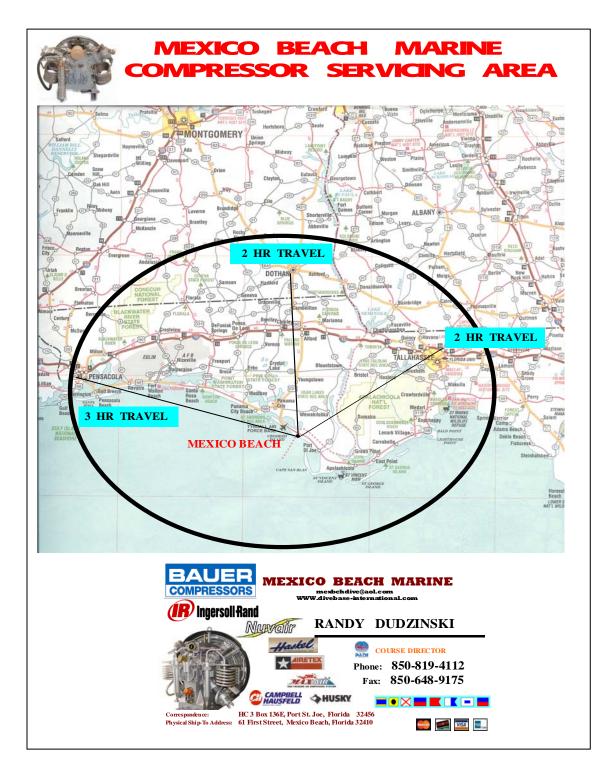








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#### **Our clients**

#### include:

- Main Fire Department, Tyndall AFB, Fl
- Main Fire Department, Panama City Beach, Fl
- \* Highland Park Fire Dept., Bay County, Panama City, Fl
- \* Thomas Drive Fire Dept, Bay County, Panama City, Fl
- \* City of Panama City Beach, Fire Department, Fl
- \* Naval Damage Control Fire Fighting Section-Naval Surface Warfare-Center Panama City, Fl
- \* U.S. Marine Expeditionary Depot-Naval Surface Warfare Center-Panama City, Fl
- \* Bay County Sheriff's Office Dive Rescue Team, Panama City, Fl
- \* USAF, 796<sup>th</sup> Civil Engineering Squadron, Maintenance Section, Eglin AFB, Fl
   \* USAF, 796<sup>th</sup> Civil Engineering Squadron, Fire Dept., Eglin AFB, Fl
- Gulf Coast Community College Fire Training School-Panama City, Fl
- \* Florida State University-Turkey Point Marine Lab, Tallahassee, Fl
- \* Chipola Community College Fire Training School, Marianna, FL
- \* Divers Den dive shop, Thomas Drive, Panama City Beach, Fl
- \* Divers Den dive shop, Tyndall Pkwy, Parker, FL
- \* Divers Emporium dive shop, Crestview, Fl \* Down Under Dive Center, Crawfordville, FL
- \* Calhoun County Fire Dept., Fl
- \* Anteon Corporation, Military Defense Contractor, Panama City Beach, Fl
- \* US Navy Underwater Explosive Ordinance Disposal School, Eglin AFB, Fl
- \* US Navy Experimental Dive Unit, NSA, Panama City Fl
- US Navy Underwater Diving School, NSA. Panama City, Fl
- \* US Navy Public Works Planning Division, NSA . Panama City, Fl
- City of Lynn Haven Fire Department, Fl
- USAF Silver Flag Fire Training Center, Tyndall AFB, FL
- \* US Navy Main Fire Station, NSA Panama City, Fl
- \* City of Parker Fire Dept, Parker, Fl
- \* The Scuba Shop, Ft. Walton Beach, Fl
- \* D & B Enterprises, Military Defense Contractor, Panama City Beach, Fl
- \* Freeport Shipbuilding, Freeport Fl
- \* 20<sup>th</sup> Special Forces, USA, Birmingham, Al
- \* Culligan water regional processing plant, Panama City, Fl
- \* USAF 33<sup>rd</sup> Fighter Wing/Maintenance, Eglin AFB, FL
- \* Walton County, FL., Department of Emergency Services
- \* Ocean City-Wright, Fort Walton Beach, FL

Because we are centrally located, our area customers can get faster, cheaper service, by not having to pay travel expenses for high-pressure air technicians to come from other compressor company locations as far away as five travel-hours.

In High-Pressure air, we are dealers for Bauer, Nuvair, Max-Air, Hypress, Alkin and Ingersoll-Rand brand compressors and Haskel brand Booster Pumps. In addition we provide normal maintenance service for Mako and Eagle brand compressors.

Our Low pressure compressor lines are Campbell Hausfeld (Lowes), Husky (Home Depot) and Ingersoll-Rand (Sears and Industrial units), Speedaire and Westward Compressors. In addition we provide normal maintenance service for Champion, and Pro-Air brand Low Pressure units.

We have now made it possible to speed sales of equipment, service, and parts to our panhandle customers. Being centrally located in the Mexico Beach/Tyndall AFB, Panama City, area, we are only hours away from either Pensacola or Tallahassee.

Our mobile compressor maintenance services are fully capable of conducting just about any required compressor repairs, in the field. We can also provide compressor unit relocation for small to medium sized compressor systems or for off-site repairs.



Thomas Drive Volunteer Fire Dept Bauer-Verticus model being moved

## \* DOES YOUR COMPRESSOR NEED "PROFESSIONAL MAINTENANCE?"



**Famous words:** "It's been running fine for the last FIVE years"!

LAST OIL CHANGE WAS ??????

DO YOU THINK IT COULD BE A COOLING PROBLEM?





#### "IT WAS MAKING A FUNNY NOISE IN THE CRANKCASE SO I TURNED IT OFF"



VALVES ---''MY COMPRESSOR WON'T GO TO PRESSURE!''

#### **BURNED VALVES**



#### CYLINDERS —''I DON'T UNDERSTAND, IT WAS ONLY STORED FOR 3 YEARS''



#### Semi-Annual and Quarterly Compressor Maintenance Program:

We offer Semi-Annual and quarterly compressor maintenance program for our clients. As a rule, industrial nonbreathing air machines use the semi-annual maintenance frequency based on their individual mission requirements established for the machine. Some machines however, due to business demands or industrial mission, cannot be allowed to "break down" and therefore, maintain a quarterly maintenance schedule.

The rule of thumb is how important is your compressor to your individual operation. Can your business or industrial operation afford for your compressor to be down for troubleshooting, awaiting parts, and subsequent repair time? During quarterly maintenance of the machine we can plan scheduled repairs to be accomplished during these maintenance sessions with little compressor down time experienced.

Many agencies such as fire departments and dive shops are required, by either specific Fire Regulations or in the case of dive shops, by the State of Florida Dept. of Health, to have air sampling done on a Quarterly basis.

We offer our preventative maintenance scheduled in conjunction with the quarterly air sampling requirement. This insures a minimum of operational down-time and provides a complete service record for their administrative files.

Also during quarterly inspections and servicing can also catch problems while they are still small and can be corrected in a timely manner. This service directly relates to reduced compressor operation interruption of your scuba shop business, fire protection program or industrial application operational capabilities.

### **MEXICO BEACH MARINE**

#### **Standard Service Charges:**

HIGH PRESSURE: We are able to accommodate all High Pressure Bauer, Nuvair, Max-Air, Alkin, Hypress, Ingersoll-Rand and Haskel Booster Pump In-Warranty and Post-Warranty service requirements. Normal maintenance service is offered for Mako and Eagle brand compressors.

LOW PRESSURE: We are able to accommodate all Low Pressure, Campbell Hausfeld, Husky, Speed-Air, Westward, and Ingersoll-Rand, In-Warranty and Post-Warranty service requirements. Normal maintenance service offered for Champion, Pro-Air, Quincy, and other name brand compressors.

- \$ 80 Per hour, technician on site repair time.
- \$ 100 Per hour, technician on site repair time for EMERGENCY, HOLIDAY, AFTER HOURS, AND WEEKEND CALLS--Travel \$40 hr.
- \$ 0 No travel time charges for scheduled quarterly service calls within the Mexico Beach, Port St. Joe, Panama City, Eglin AFB—Ft. Walton Beach and the Tallahassee Area.
- \$ 0 Travel time charges for areas outside the above zone area but where we have multiple-clustered-machines that can be serviced either all in one area, or several along a specific "Quarterly Service" travel route.
- \$ 40 Per hour-travel time, Emergency calls and service calls for customers **NOT** in conjunction with scheduled quarterly maintenance or for customers not participating in our quarterly maintenance programs and requiring response outside the Panama City, Ft. Walton and Tallahassee areas.
- \$ 40 Per hour travel time to any other area not listed above.

\$ Fuel Fuel Surcharge based on actual fuel costs

\$ 95 Air sampling test. SPECIAL PRICE \$65--When in conjunction with a quarterly maintenance program.

\$ 15 Per tank. SCBA and Dive Tank Annual Visual Inspections can be done on site or at your station house.

#### All compressor parts prices are list costs for:

High Pressure--Bauer, Haskel, Nuvair, Hypress, Max-Air, Alkin, Ingersoll-Rand, Mako, and Eagle.

Low Pressure--Campbell/Hausfeld, Husky, Westward, Ingersoll-Rand, Champion, Pro-Air and Speed-Air.

## AIR COMPRESSOR **Costs for our Scheduled Compressor Maintenance Services**

Price quotes are for semi-annual and quarterly compressor maintenance checkup and air sampling----- per compressor unit.

(Special pricing is offered for air-testing for our customers in our quarterly maintenance program. Regular air test price \$95, for quarterly maintenance customer \$65)

6 Month-Semi-Annual Service (No Air Sampling)



#### (Low Pressure Industrial Machines)

Maintenance: 2 calls per year, industrial machine no air sample; \$400 per year / 2 = \$200 per six monthperiod.



High Pressure(Industrial Machines)

Maintenance: 2 calls per year, industrial machine no air sample; \$400 per year / 2 = \$200 per six monthperiod.

#### **3 Month- Quarterly Service**



Low Pressure (Industrial Machines----No Air Sampling) Maintenance: 4 calls per year; \$ 700 per year / 4 = \$175 per quarter



High Pressure (Fire and Scuba----No Air Sampling)

Maintenance: 4 calls per year;

\$ 700 per year / 4 = \$175 per quarter



High Pressure (Fire and ScubaWith Air S	ampling)	
* Maintenance: 4 calls per year;	\$ 700 per year	/ 4 = \$175 per quarter
* Air Sampling: 4 samples per year, one each quarter;	\$ 260 per year	/ 4 = \$ 65 per quarter

**One-year contract required** 

\$ 960 per year /4 = \$ 240 per quarter

In order to assist in budgeting requirements, a purchase order (PO) for the entire yearly amount can be accomplished and we will only charge the (PO) for the maintenance and air sampling in quarterly increments as they are accomplished during the year. Not included in the maintenance check:

\* Replacement parts as required

- \* Purification cartridges costs are not included but will be
- changed on proper "hours of use" schedule as recommended by the factory.
- Compressor oil
- \* Hydrostatic testing of storage tanks
- Emergency service calls. Carbon Monoxide Sensor calibration gas.

Included in the maintenance check:

- Oil change labor on oil change schedule recommended by factory service schedule
- Labor to change filter cartridges as recommended by the
- factory service schedule \* CFM output calibration check
- Adjustment of drive belts
- Inspection of safety valve factory seals as required
- Inspection of cylinder valves as recommended by the
- factory service schedule
- \* Inspection and tightening of all head and cylinder bolts.
- General overall compressor inspection

## WE SERVICE: AIR COMPRESSORS — ALL BRANDS







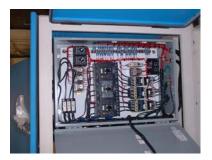






## BAUER NITROGEN GENERATORS







## NITROGEN GENERATOR SERVICE PROGRAMS

## **Costs for our Scheduled Compressor Maintenance Services**

Price quotes are for quarterly and semi-annual Nitrogen Generator maintenance check-up----- per compressor unit.

### **6 Month-Semi-Annual Service--**Nitrogen Generators



(Low Pressure Industrial Machines) 200 PSI Maintenance: 2 calls per year, industrial machine; 400 per year / 2 = 200 per six month period.

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High Pressure(Industrial Machines) 6000 PSI

\* Maintenance: 2 calls per year, industrial machine, 3750.00 per year /2 = 375 per six month period.

#### **3 Month- Quarterly Service Nitrogen Generators**



Low Pressure (Industrial Machines 200 PSI \* Maintenance: 4 calls per year;

**\$ 700 per year** / 4 = **\$175 per quarter** 



High Pressure (Industrial Machines 6000 PSI \$ 1,400 per year / 4 = \$350 per quarter

\*

Maintenance: 4 calls per year;

Not included in the maintenance check:

\* Replacement parts as required

- Purification cartridges costs are not included but will be changed on proper "hours of use" schedule as recommended by the factory.
  - Compressor oil
- Hydrostatic testing of storage tanks
- Emergency service calls.
- Carbon Monoxide Sensor calibration gas.

Included in the maintenance check:

- Oil change labor on oil change schedule recommended by factory service schedule Labor to change filter cartridges as recommended by the
- factory service schedule
- \* CFM output calibration check
- \* Adjustment of drive belts
- \* Inspection of safety valve factory seals as required Inspection of cylinder valves as recommended by the factory service schedule
- Inspection and tightening of all head and cylinder bolts.
- \* General overall compressor inspection





Introducing the NEW Classic II









BAUER COMPRESSORS, INC.

Totos N.W. Sard Street Sunrise Florida 33351 Telephone: 954-746-2504 Telefax: 954-746-2510 E-Mail: fils@bauercomp.c Toll Free: 688-DIVE AIR

#### February 6, 2002

To: All Florida panhandle area "BAUER Compressors" customers

It is with great pleasure that the BAUER Compressors, Inc. welcomes Mexico Beach Marine, of Mexico Beach, Florida as our newest authorized sales and service center in the Florida Panhandie region. Mexico Beach is just East of Panama City and is geographically located in the epicenter of the Florida Panhandie. They will provide centralized BAUER compressor service to the Panhandie area from Taliahassee to Pensacola.

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Mexico Beach Marine's service personnel have been factory trained at our headquarters in Norfolk, Virginia. They are fully familiar with all aspects of BAUER compressor parts, service, and warranty requirements.

We hope that providing the Florida Panhandle area with BAUER compressor services will better serve our existing customer base while at the same time offering new BAUER customers products and service within reasonable proximity to their businesses.

Maxico Beach Marine can be contacted at: 4003 Highway 98, Mexico Beach, Florida, mailing address: P.O Box 14134, Mexico Beach, Florida 32410, phone: 850-819-4112, Fax: 850-648-9517, E-Mail: MEXBCHDIVE@AOL.COM.

Sincerely, GUL

George Cuadrado General Manager BAUER Compress ors, Miami

Sec.	DAUER
This	Certificate is Hereby Awarded
	to
	Randy Dudzinski
	for having astatus toring completed
Die h	un anost of outraction for Overhald and Reput of
Ĥ	gh Pressure Breathing Air Compressors
	October sains
	MARK COMPRESSORS NC
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	- KUNAA



### **AIR STATIONS**







## **DOT AND ASME CYLINDERS**



**CONTAINEMENT FILL STATIONS** 



## FILTRATION SYSTEMS AND ELECTRONIC FILTER MONITORING







## Storage Systems and Accessories High Pressure Air and Inert Gases



## 4500 - 6000 PSIG DOT and ASME Cylinders

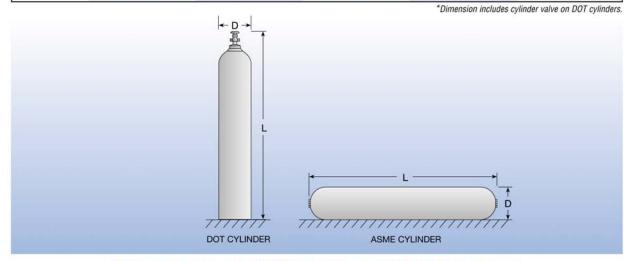




Air cylinders for storage are available to meet the code requirements of either the American Society of Mechanical Engineers (ASME) or the Department of Transportation (DOT).

The table below provides a summarization of technical data for cylinders offered by BAUER when storing air. Refer to the back page of this brochure for technical data when storing inert gases.

MODEL	PRESSURE RATINGS WORKING / TEST PSIG	WATER VOLUME cu in / cu ft	AIR CAPACITY AT WORKING PRESSURE SCF	DIMENSIONS* INCHES	WEIGHT LBS
DOT 4500	4500 / 6750	2750 / 1.59	444	9.31 OD x 55 L	144
DOT 5000	5000 / 7500	2750 / 1.59	472	9.38 OD x 55 L	158
DOT 6000	6000 / 9000	2640 / 1.53	509	9.28 OD x 55 L	188
ASME 5000	5000 / 10500	2590 / 1.47	436	9.62 OD x 54 L	400
ASME 6000	6000 / 10500	2590 / 1.47	491	9.62 OD x 54 L	400



#### ASME storage systems to 7000 PSI available. Contact BAUER for assistance.

Bulk storage for limiting the number of compressor starts to 4 times per hour can be calculated by the following formula: **VR = 58 x (QC /**  $\Delta$ **P**)

Where:

- VR = Volume of storage, cubic feet water volume
- QC = Capacity of compressor, standard cubic feet per minute (scfm)

•  $\Delta P$  = Approximate deadband of final pressure switch, pounds per square inch (psid) Multiple cylinders can be used for applications that require a large volume of storage.

Contact BAUER for sizing storage with multiple banks for cascading.

WORKING PRESSURE PSIG	(PSID)
4500	450
5000	500
6000	600

Cubic Feet = Gallons x 0.134 Gallons = Cubic Feet x 7.48

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## **DOT Storage Systems**

	MODEL	DESCRIPTION
20	CYL-0013	DOT cylinder manufactured in accordance to DOT-E 9421 specification. 444 SCF capacity referenced to 70°F and 4500 PSIG. Nominal water volume 1.59 cubic feet. Includes dual port manifold valve with 1/4° NPT ports 180° apart. Valve includes a pressure relief device. Weight, 144 lbs. empty.
200	HC4500-1/BULK	DOT 4500 PSI single cylinder assembly for bulk storage. Includes 1 CYL-0013 with pressure gauge, check valve and hose connectors supplied loose.
4	HC4500-1/BANK	DOT 4500 PSI single cylinder assembly for bank storage (for use with a BAUER Cascade Panel). Includes 1 CYL-0013 with 1 hose connector and 1 plug supplied loose.
~	CYL-0062	DOT cylinder manufactured in accordance to DOT-E-10869-5000 specification. 472 SCF capacity referenced to 70°F and 5000 PSIG. Nominal water volume 1.59 cubic feet. Includes cylinder valve with CGA 347 connection. Valve includes a pressure relief device. Weight, 158 pounds empty.
	HC5000-1/BULK	DOT 5000 PSI single cylinder for bulk storage. Includes 1 CYL-0062 with pressure gauge, check valve, miscellaneous pipe fittings, and pipe and hose connectors supplied loose for customer assembly.
	HC5000-1/BANK	DOT 5000 PSI single cylinder assembly for bank storage (for use with a BAUER cascade panel). Includes 1 CYL-0062 with 1 hose connector.
20	CYL-0011	DOT cylinder manufactured in accordance to DOT-E 9909 specification. 509 SCF capacity referenced to 70°F and 6000 PSIG. Nominal water volume 1.53 cubic feet. Includes dual port manifold valve with 1/4° NPT ports 180° apart. Valve includes a pressure relief device. Weight, 188 lbs. empty.
5000 P	HC6000-1/BULK	DOT 6000 PSI single cylinder assembly for bulk storage. Includes 1 CYL-0011 with pressure gauge, check and hose connectors supplied loose.
	HC6000-1/BANK	DOT 6000 PSI single cylinder assembly for bank storage (for use with a BAUER Cascade Panel). Includes 1 CYL-0011 with 1 hose connector and 1 plug supplied loose.

Additional cylinders are available for Bulk or Bank assemblies, includes cylinder valve, interconnecting bigtail and miscellaneous fittings. Change model number to re number of cylinders (i.e. HC6000-2/BULK, HC6000-3/BANK) Hose connectors can be removed for 1/4\* NPT pipe connection.

The mandatory retest period for these DOT cylinders is every five (5) years. Under no circumstances are these cylinders to be filled to a pressure exceeding the marked service pressure at 70° F.

	ACCESSORIES FOR DOT CYLINDERS				
PART	PART NUMBER	DESCRIPTION			
	ADP-0058	Adapter, CGA 347 Male x 1/4" NPT Female, Stainless Steel.			
	NUT-0043	Nut, CGA 347, Stainless Steel. Use with NIP-0117.			
	NIP-0117	Nipple, CGA 347 x 1/4" NPT Male, 3" Length, Stainless Steel with Hard Seat. Use with NUT-0043.			
Ĩ	VAL-0351	Valve, dual outlet manifold valve for DOT 4500 cylinders. Includes two (2) 1/4" NPT ports and pressure relief device. Ports are 180" apart.			
Å	VAL-0352	Valve, dual outlet manifold valve for DOT 6000 cylinders. Includes two (2) 1/4" NPT ports and pressure relief device. Ports are 180" apart.			
I	NOT AVAILABLE	Valve, CGA 347 for DOT 5000 cylinders. Includes pressure relief device.			

All DOT cylinders are shipped with a protective cap for the cylinder valve. Valve caps are shipped installed on loose cylinders and shipped loose with racked assemblies.



## **ASME Storage Systems**



MODEL	DESCRIPTION
CYL-0009	ASME cylinder, 436 SCF referenced to 70° F & 5000 PSI; 491 SCF at 6000 PSI; 537 SCF at 7000 PSI. Nominal water volume 1.47 cubic feet. Section VIII MAWP = 5250 PSI, Appendix 22 MAWP = 7000 PSI Weight, 400 lbs. empty. ASME Section VIII, Division 1 latest edition for non-corrosive service only.
SAS-1-5K/BULK	5000 PSI ASME cylinder bulk storage assembly. Includes cylinder valve, drain valve, ASME relief valve, 1/4" hose connector and plug supplied loose.
SAS-1-5K/BANK	5000 PSI ASME cylinder bank storage assembly for use with a cascade panel. Includes cylinder valve, drain valve, ASME relief valve, 1/4* hose connectors, pressure gauge and check valve supplied loose.
SAS-1-6K/BULK	6000 PSI ASME cylinder bulk storage assembly. Includes cylinder valve, drain valve, ASME relief valve, 1/4" hose connector and plug supplied loose.
SAS-1-6K/BANK	6000 PSI ASME cylinder bank storage assembly for use with a cascade panel. Includes cylinder valve, drain valve, ASME relief valve, 1/4* hose connectors, pressure gauge and check valve supplied loose.

Additional cylinders available for Bulk or Bank assemblies. Additional cylinders include cylinder valve, ASME relief valve, drain valve, interconnecting pigtail and miscellaneou fittings. Change model number to reflect number of cylinders (i.e. SAS-2-5K/BULK,SAS-3-6K/BANK). Hose connectors can be removed for 1/4\* NPT pipe connection.

# All components are supplied loose from DOT and ASME cylinders unless purchased factory installed in a rack. Installation, assembly and interconnecting piping to the system are the responsibility of the installer.

RACKS AND RACK ACCESSORIES FOR DOT AND ASME CYLINDERS				
PART	PART NUMBER	DESCRIPTION		
	RCK-0037	Universal two position steel rack. Designed for horizontal or vertical configuration and suitable for stationary or mobile applications. Multiple racks can be bolted together to form larger storage systems. Each rack includes four sets of cylinder clamps. Specify the type of cylinder and rack configuration at order placement. Reference drawings for available configuration schemes and dimensions. Mounting hardware for installation is not included. Weight, 125 lbs.		
	5 DOT-2*	Unistrut channel and two clamp sets, one for each DOT cylinder. For use with DOT cylinders only. Channel must be anchored to a vertical surface. Mounting hardware for installation of the rack is not included. See below for ordering racks for additional cylinder positions.		
<b>L</b>	CMP-0106	Clamp set for DOT cylinders. Includes fastening hardware.		
	CMP-0027	Clamp set for ASME cylinders. Includes fastening hardware.		

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\*Additional mounting positions available. Change model name to reflect number of positions (i.e. DOT-3, DOT-4)

# Piping Accessories High Pressure Air and Inert Gases

PART	PART NUMBER	DESCRIPTION
	VALVES (I	LINE, VENT, CHECK)
	VAL-0006	Line Valve, 1/4" NPT Female Inlet x 1/4" NPT Male Outlet
	VAL-0076	Panel Mounted Version of VAL-0006
	VAL-0316	Line Valve with Vent, 1/4" NPT Female. Vent valve vents the downstream side of the valve.
	065126	Vent Valve, 1/4" NPT Female, 5000 PSI
	VAL-0377	Vent Valve, 1/4" NPT Female x 1/4" NPT Male
	VAL-0140	Vent Valve, 1/4" NPT Male, 10,000 PSI
	VAL-0007	Check Valve, 1/4" NPT Female Inlet x 1/4" NPT Male Outlet
	VAL-0176	Check Valve, 1/4" NPT Male Inlet x 1/4" NPT Female Outlet
	PI	PE FITTINGS
	CON-0017	1/4" NPT Nipple with Hex Wrench Surface
<b>F</b>	CON-0018	1/4" NPT Coupling with Hex Wrench Surface
	CON-0042	1/4" NPT Cross, Female
	ELL-0017	1/4" NPT Elbow, Female
	ELL-0018	1/4" NPT Elbow, Female x Male
	ELL-0058	1/4" NPT Elbow, Male
	PLU-0004	1/4" NPT Plug
	TEE-0012	1/4" NPT Tee, Female with Male Run
	TEE-0013	1/4" NPT Tee, Female
	TEE-0014	1/4" NPT Tee, Female with Male Branch
	TEE-0036	1/4" NPT Tee, Male with Female Branch
	TEE-0040	1/4" NPT Tee, Male



# System Accessories High Pressure Air and Inert Gases



PART	PART NUMBER	DESCRIPTION
	F	REGULATORS
	REG-0003	Adjustable Regulator, 6000 PSI In, 5000 PSI Out. 1/4" NPT Ports for Inlet, Outlet and 2 Gauge Ports.
1 Ben	HOSE FITTINGS,	HOSE & HOSE ASSEMBLIES
	ADP-0004	Adapter, 1/4" NPT Female Swivel x 1/4" Male
	CON-0039	Pipe to Hose Connector, 1/4" NPT Male x 37° Flare (JIC)
	ELL-0031	Pipe to Hose Elbow, 1/4" NPT Male x 37° Flare (JIC)
	H0S-0120 H0S-0121 H0S-0123 H0S-0125 H0S-0127 H0S-0128 H0S-0129	2-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 3-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 5-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 10-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 15-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 20-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 20-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 25-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel 25-ft Hose, 6000 PSI, 1/4" NPT Male x 37° Flare (JIC) Female Swivel
0.0	BFFD-347	5-ft Fill Hose Assembly, 1/4" NPT Male x BFFD-347 Connector. Includes Line Valve with Vent and Pressure Gauge.
		ITTINGS & TUBING
	CON-0030	1/4" Tube x 1/4" NPT Male
	ELL-0028	1/4" Tube Elbow x 1/4" NPT Male
	ELL-0056	1/4" Tube Elbow x 1/4" NPT Female
	TEE-0037	1/4" Tube Tee x 1/4" NPT Male Branch
	TEE-0038	1/4" Tube Tee x 1/4" NPT Male Run
	TEE-0039	1/4" Tube Tee x 1/4" NPT Female Branch
	TUB-R-0011	Seamless Stainless Steel Tubing, 1/4" OD x 0.049" Wall Thickness. Rated To 7500 PSIG. Available Only in 5-ft Lengths.
0	TUB-0517	1/4" Tube Pigtail, Made From TUB-R-0011, Approximately 24" Overall Length. Use for Interconnecting Storage Cylinders.
	PRE	SSURE GAUGES
	GAG-0009W	Pressure Gauge, 0-7500 PSI, 2 1/2" Gauge Face, Liquid Filled. 1/4" Center Back Mount (male) with U-Clamp.
Ŷ	GAG-0070W	Pressure Gauge, 0-7500 PSI, 2 1/2" Gauge Face, Liquid Filled 1/4" Bottom Connection (male).
	R	ELIEF VALVES
- The	VAL-0022	ASME Relief Valve, factory set at 5250 PSI. ASME cylinder must be protected by an ASME relief valve. 1/4" NPT male connection.
	VAL-0154	ASME Relief Valve, factory set at 6500 PSI. ASME cylinder must be protected by an ASME relief valve. 1/4" NPT male connection.
a . (	VAL-0169	Relief Valve, Adjustable to 6500 PSI. This relief valve is not suitable for use on DOT or ASME cylinders. It can be used downstream of a pressure regulator and in other locations for overpressure protection. 1/4" NPT Male Connection. Factory set at customer specified pressure.
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## Technical Data High Pressure Air and Inert Gases



#### COMPRESSIBILITY OF GASES, VOLUMETRIC

The table below lists the volume of different gases that can be compressed into one (1) cubic foot water volume at the given pressure. The information is based on  $70^{\circ}$  F and accounts for the compressibility of the gas. The table can be used to calculate the volume of air or gas that can be stored in a cylinder of known water volume. Likewise, the water volume of a cylinder can be calculated if the capacity of air or gas stored in the cylinder is known.

GAUGE PRESSURE PSIG	AIR SCF	NITROGEN SCF	ARGON SCF	HELIUM SCF
1000	70.29	69.30	71.79	66.37
1500	104.77	102.74	108.50	98.12
2000	137.77	134.90	145.30	128.55
2500	169.11	165.39	181.50	158.08
3000	198.96	193.82	216.30	186.78
3200	209.83	204.61	229.70	198.03
3500	226.14	220.26	249.20	214.66
4000	251.34	244.39	279.90	241.79
4200	260.98	253.51	291.60	252.44
4500	274.85	266.60	308.30	268.19
4700	283.54	275.07	319.10	278.55
5000	296.57	286.67	334.40	293.90
5200	304.84	294.39	344.30	304.00
5500	316.03	305.80	358.40	318.95
6000	334.06	322.77	380.30	343.37

Example 1: Fir

 Find the volume of air a DOT 6000 cylinder will hold at 5000 PSIG. DOT 6000 = 1.53 CF water volume
 @ 5000 PSIG, 296.57 SCF air / SCF water volume
 1.53 x 296.57 = 453 SCF

Example 2: If a cylinder is known to hold 200 SCF of Argon at 2000 PSIG, what is its water volume? @ 2000 PSIG, 145.3 SCF Argon / SCF water volume 200 SCF / 145.30 SCF/SCF = 1.38 SCF (water volume)

Example 3: How many 45 SCF (air volume) tanks can be filled from 0 to 4500 PSIG from two DOT 6000 cylinders arranged for bulk storage? DOT 6000 = 1.53 CF water volume, 509 SCF each, 1018 SCF for 2 @ 4500 PSIG, each DOT 6000 cylinder will hold 1.53 SCF x 274.85 SCF/SCF = 420 SCF Available volume from each cylinder, 509 SCF - 420 SCF = 89 SCF, 178 SCF from 2 Number of fills, [(89 SCF x 2) / 45 SCF] = 4 tank fills, figure 3 tank fills to be conservative

This brochure includes information for the most common storage systems and accessories offered by BAUER. Many other varieties of accessory components and custom storage systems are available. Contact a BAUER sales representative for assistance.

High pressure storage systems and their accessories must be installed, maintained and operated only by trained individuals. Misuse can result in personal injury or death. BAUER recommends the use of high pressure stainless steel tubing for permanent installations. High pressure hose should be used for temporary use only. Items shown in this brochure are suitable for use with air, nitrogen, argon and helium, and are not intended for oxygen service.

BAUER COMPRESSORS, INC. continuously reviews their products' design and performance to better to serve our customer's needs. Therefore, information contained herein is subject to modification without notice or obligation.

Products contained herein are subject to the standard terms and conditions of sale and warranty of BAUER COMPRESSORS INC. A copy of the standard terms and conditions of sale and warranty are available on request.

#### Proudly Distributed By:

SSA04.11.5sp

BAUER COMPRESSORS Inc. 1328 AZALEA GARDEN ROAD NORFOLK, VIRGINIA 23502-1944 TELEPHONE: (757) 855-6006 TELEFAX: (757) 857-1041 E-MAIL: sls@bauercomp.com WEBSITE: www.bauercomp.com





# GENUINE BAUER PARTS





## Lu Ger ara

#### **Fill Hoses and Assemblies**

BAUER inventories fill hoses and fill hose assemblies for most applications. Each hose and assembly is factory tested for your safety and assurance. Firefighting, SCUBA Diving, Paintball or Industrial Air and Gas applications... we service them all. We assemble and test to order also. Special order for applications to 10,000 PSI is not a problem.

#### Valves

A full line of valves for air and gas processing is readily available for your compressor needs. Needle valves for panels and fill assemblies, solenoid valves, check valves, auto drain valves and sequential valves are just a few of our many factory stocked items. Ask us about your particular requirement.

#### **Lubrication Systems**

Genuine oil filter elements, sight glasses, oil pump belts and oil pumps are the components that act as the heart of your compressor pump... rushing factory recommended lubricant to critical friction sites through your compressor block. These parts and systems work together with the lube to afford you hours of protection and operation. Be certain that periodic inspection of these critical parts are on your checklist.



We package factory original parts that are manufactured to uncompromising specifications and offer these materials for user-friendly installment. Parts are grouped into sets according to the maintenance interval or area of repair required. Whether you require a basic gasket and an o-ring set or a more comprehensive 3000-hour maintenance your source is BAUER.







# GENUINE BAUER PARTS





#### **Gaskets and Seals**

You want your unit to keep the original quality that was manufactured when it was factory new. Why install material of unknown origin or material. Differences in material composition and quality even in a gasket or seal can mean costly repairs to more expensive parts. Insist on factory original parts. You bought the best when you purchased your compressor. Keep it in top shape. Your compressor will give you uncompromising performance with quality parts.

#### Lubricants

The performance of your compressor depends on basic maintenance. The lubricant provided with your compressor has been chosen and tested by us to meet or exceed all industry standards. Using these lubricants assures peak performance of your unit with minimal piston, cylinder and valve wear. We have a quality lubricant appropriate for each compressed air and gas BAUER unit you own.



#### Purification

Confidence should be your touchstone when buying purification or replacement cartridges for you compressor. Leading technology coupled with stringent quality control produces a product unparallel and unsurpassed. Our PUREAIR clean room, superior materials and vacuum packaging assures you the security you deserve. Ask us about our breathing air and industrial applications that are sure to meet your needs.

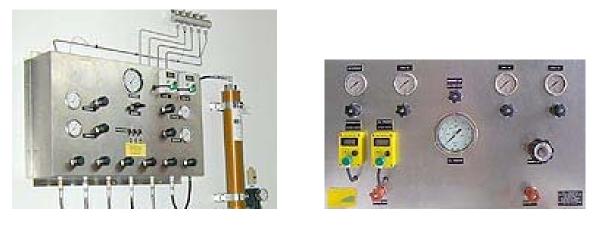
#### **Air Intake Filters**

The air compressed by your unit passes through many mechanical parts on its way to your final applications. Why not be confident that the air you process internally is clean from the onset. Factory original air intake elements strain particulates before they reach the first stage of your compressor. Don't settle for substandard elements that allow abrasive particles inside your compressor. Check out our complete line of superior inlet cartridges.



## NITROX and COMPRESSOR SYSTEMS

## NITROX CONTROL PANELS



NITROX MEMBRANE SYSTEMS





## COMPLETE PORTABLE NITROX SYSTEMS







A Note from Nuvair:

After 5 years of operating as Undersea Breathing Systems International designing and building the Explorer, Tech, Tech 250 HP, Tech 250 LP, Techmaster, Silent Tech 9 and many other packages we changed our name to NUVAIR in 2003.

In 2005 we changed our product names so they can not be confused with products from our old affiliate.

Our new Product Line includes the Traveler, Element HP, Element LP, Titan, Voyager and our Rotary Screw Line of the LP280, LP420, LP560 and LP713.

The "New & Improved" NUVAIR membrane system is up to 20% more efficient and

easier to use when producing 40% o2 and can produce almost double the volume of the old system at 32% O2.

This can mean saving \$\$ on the low pressure compressor and membrane as a smaller size may handle the same job. <image><text><text><text><text><text><text>

Best regards,

Craig Huebner craig@nuvair.com www.nuvair.com Ph: (805)815-4044 Fax: (805)815-4196 2949 West 5th Street Oxnard, Ca. 93030 USA

\*

This also means that if you have an existing Undersea Breathing Systems Membrane system you bought years ago, Mexico Beach Marine can supply replacement Nuvair parts and service for these older units.

## HOW THE NITROX MEMBRANE SYSTEM WORKS

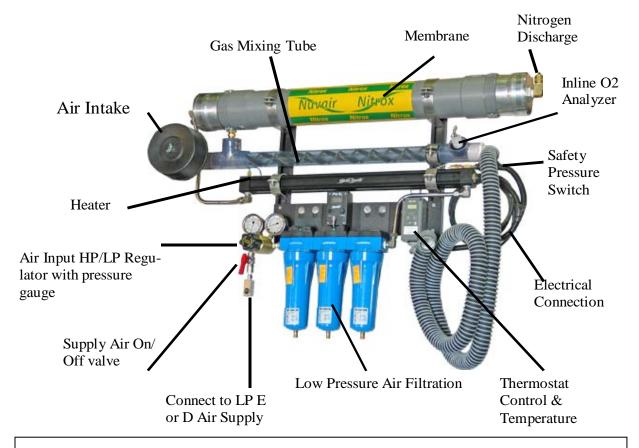
## First there are three ways to make Nitrox.

Handle 100% O2 Purchase Oxygen	1. Partial Pressure Blending You mix 100% O2 in your storage bank tanks making a standard bulk Nitrox mix for sale. The other Partial Pressure method is to mix 100% O2 in a customers tank marked Nitrox and hope they have not filled it with contaminated normal grade air since the last time you serviced them. Adding 100% O2 to a contaminated tank can cause a fire or explosion. You must Purchase Oxygen.
Handle 100% O2 Purchase Oxygen	2. Continuous Blending You have a mixing device attached to the intake of your compressor and you feed it 100% O2 blended with incoming air to get a Nitrox mix. You must Purchase Oxygen.
Handle Only a Maximum of 40% O2 Do Not purchase	3. Membrane Systems – You have a device that takes the Nitrogen out of the air giving you a meterable low percentage of O2 (Below 40%) to use as the intake gas for your high pressure compressor.
Oxygen <sup>1</sup> Make your own	The industry standards for Nitrox mixes are Nitrox 32 and Nitrox 36. Both below the 40% Oxygen industry level maximum for fire hazard concerns.
	You never handle 100% Oxygen, only levels up to 40%.
	You do Not purchase OxygenMake your own

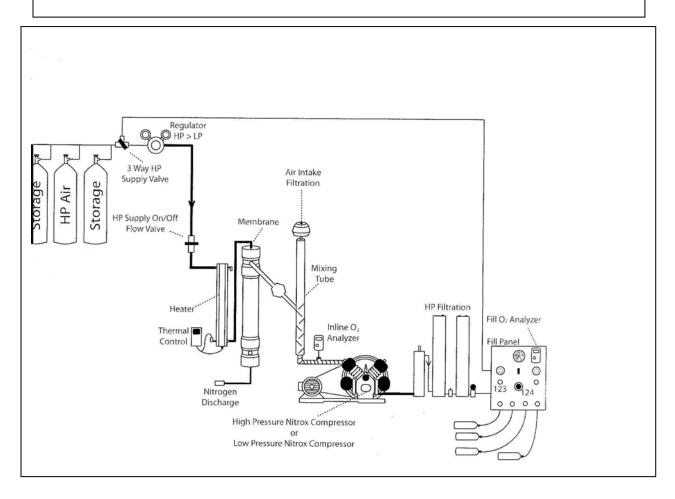
Remember, 100% O2 is extremely hazardous to handle and requires specific O2 handling procedures. Oxygen fires and explosions have occurred in the dive industry from using systems requiring over 40% Oxygen content.

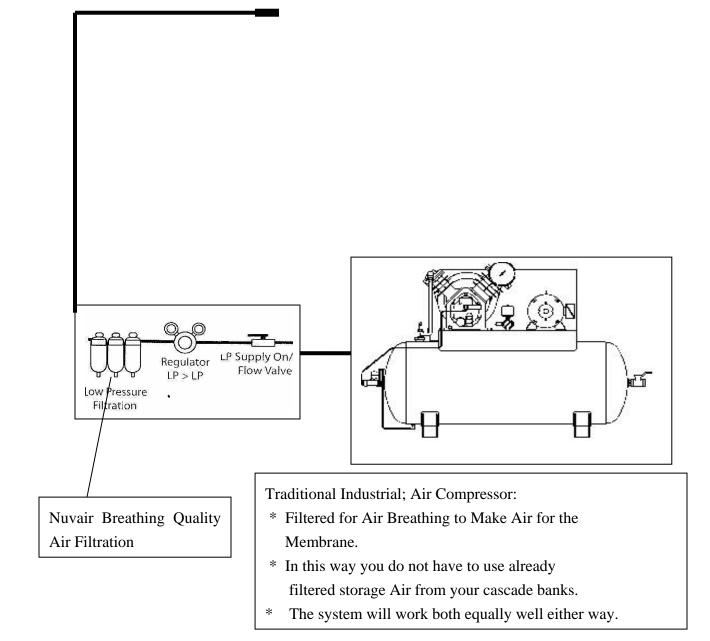
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The Nuvair Membrane extremely reduces any O2 problems by eliminating the handling of O2 over 40%.



This System utilizes your existing compressor and existing Air Storage Banks to make NITROX







## **Nuvair Membrane System**

### **HOW DOES IT WORK?**

The system requires an air source to supply air to the membrane for separation.

- \* This air source (supply air) can be from high-pressure storage tanks or from a low-pressure compressor sized to the intake capacity of the high pressure compressor.
- \* First, the supply air pressure must be reduced to 80-300 PSI for use in the membrane.
- \* A regulator is used to adjust the input pressure and volume of nitrox to be made.
- \* After the regulator the air travels through filtration to ensure a proper air quality that will not damage or plug the membrane fibers.
- \* After the filtration the air is heated to a stable temperature that is constant and optimal for the membrane permeation. This temperature is about 110 degrees F.
- \* After the heater the heated air then enters the membrane.



## **The Membrane:**

- \* The membrane is made up of thousands of hollow fibers. Oxygen permeates faster than nitrogen through these fibers.
- \* At the nitrogen outlet there is a fixed orifice that will allow the right amount of nitrogen to escape at maximum output to produce about 44% o2 at the permeate outlet (o2 rich gas).
- \* The permeate exits the membrane into a static mixing tube that allows ambient air to mix with permeate. The gas mixture is then analyzed with an inline sensor before delivery to the compressor for compression.
- \* As the operator increases the input pressure on the regulator, the volume of nitrox produced is increased as well as the o2% of the total gas mix.
- \* Decreasing input pressure will lower the nitrox o2% mix.
- \* After using your nitrox system you will notice that different o2 percentages match certain input pressures.
- \* These input pressures will be repeatable.
- \* Simply said, if today your compressor pumps 36% o2 when the input pressure to the membrane system is at 126 PSI. The next time you want to produce 36% o2, just adjust the pressure to 126 PSI.



## **Nuvair Membrane System**

## **HOW MUCH DOES IT COST?**

NUVAIR 6	3 - 6	CFM	@	32%-40%	O2	\$ 5,450.00
NUVAIR 10	6 -10	CFM	@	32%-40%	02	\$ 7,900.00
NUVAIR 16	10 - 16	CFM	@	32%-40%	02	\$ 10,750.00
NUVAIR 20	16 - 20	CFM	@	32%-40%	02	\$ 12,750.00
NUVAIR 32	20 - 32	CFM	@	32%-40%	O2	\$ 18,750.00

Use existing dive shop compressor and bank-air to operate the Nitrox Membrane.

## No More Oxygen Purchases. No More Handling of 100% O2 No More Oxygen Clean Requirements



Nuvair



## **Nuvair Membrane System**

HOW TO SELECT A MEMBRANE IF YOU ALREADY HAVE A COMPRESSOR.

## WHAT IF YOU ONLY WANT 32% OR 34 % CAN YOU GET A SMALLER MEMBRANE TO MEET YOUR NORMAL NEEDS?

#### -----YES.

To use the following charts all you have to know is, what is the maximum percentage of Nitrox you need to have and then match that percentage to the size of compressor you have on hand.

1. First, find the spreadsheet with the maximum Nitrox mix (Upper left Corner) you need at your facility.

2. Second, find the size of compressor you want to use in CFM, (Left Column).

3. Thirdly, find where the information in 1 and 2 above intersect and go directly up to the top of the spreadsheet and find the size of membrane sized for your specific compressor cfm.

4. This method many times refers you to a membrane one size smaller than if you needed to have 40% all the time. No need in buying 40% if you don't need it.

However, if you need higher percentages you can always partialpressure-blend the increased level.

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	\$5,450	\$7,500	\$10,750	\$12,750	\$10,750
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	\$5,450	\$7,900	\$10,750	\$12,750	\$18,75
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30	*	Phone: 850-819-4			
32		Fax: 850-648-			
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MAXIMUM	AIR N	IITROX N	EMB	BRAN	E CA	LCU	LATO	R
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	6	10		16		20		32
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	3-6 CFM	6-10 CFM		CFM		CFM		CFM
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# **NUVAIR NITROX MEMBRANE CALCULATOR**

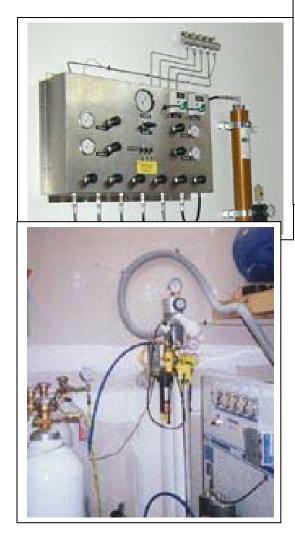
40%					
NITROX	Nuvair	Nuvair	Nuvair	Nuvair	Nuvai
	6	10	16	20	32
			10-16	16-20	20-32
	3-6 CFM	6-10 CFM	CFM	CFM	CFM
	\$5,450	\$7,900	\$10,750	\$12,750	\$18,75
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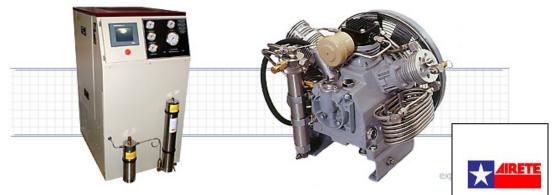




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## SPACESAVER CONTAINMENT SYSTEM MOUNTED IN FIRE TRUCK

























## HYPRES Manufacturers of High Pressure Cor

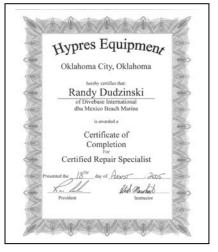
nu 183 August 18, 2005 Randy Dudzinski Disebase International Inc. Mexico Beach Mari

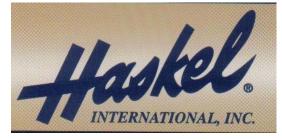
Randy Dadzimski Divebase International Inc. Mexico Beach Marine HCS Box 136 E Port St. Joe, FL 32456 Dear Mexico Beach Marine,

Recently, Mexico Beach Marine suscessfully completed the Hypres session. The course covered the following areas: Hypres compresser system pump, Class 2 Containments, DOT & ASME air storage systems, and air m. These five areas cover the necessary scope of work that a certified repair spi know.

Enclosed you will find a certificate of completion for Mexico Baech certificate designates them as a certified repair specialists for Hypres Equip It was pleasure to offer sorth a cource to enhance the abilities of our distribut forward to continuing our relationship with Mexico Beach Marine. Thank y effort.

Sincerely, Been Hills Brent Giles Marketing





## **BOOSTER PUMPS**



## EDG Series Electric Gas Booster



### MODEL : EDA-1916-A1 GAS BOOSTER

The EDA Series Electric Gas Boosters are suitable for all inert gases including air, nitrogen, helium, argon, CO<sub>2</sub>, etc.

. Utilizing a gas inlet of between 750 - 2,600 psi, the booster is designed to provide a maximum outlet gas pressure of 5,000 psi.

The booster incorporates a distance piece in the gas section that has a non lubricated linear bearing, ensuring minimal contamination, and a gas seal package providing simple maintenance.

The EDA Series Boosters are also available in a two-stage configuration, allowing for higher gas flow rates with reduced inlet pressures, as low as 450 psi. (Add -A2 suffix to part number for this configuration).

Features include inlet and outlet pressure gauges, automatic shut-off switch, variable pressure setting controls, gas safety valve and service duty monitor (hours), all located within robust, compact package.

In addition, the EDA can also be multiplexed if desired. (Please refer to selection table on reverse page).

### MODEL : EDO-1916-A1 OXYGEN BOOSTER

The EDO Series Electric Gas Boosters are specifically designed to transfer pure oxygen gas and high Oxygen content mixtures.

Similar to the EDA Series, this model is a double-acting design, allowing for the same compression ratio, but it is limited to 4,000 psi outlet gas pressure, with a minimum inlet pressure of 900 psi. For pressures below 900 psi, a two-stage configuration is required. (Add -A2 suffix to part number for this configuration).

Features include, specifically designed oxygen seal package, vented drive-case and non lubricated single gas seal providing a hydrocarbon-free gas section.

The EDO Gas Booster is provided with the same controls and benefits as described for the EDA model.

In addition, the EDO can also be multiplexed if desired. (Please refer to selection table on reverse page).





# **REBUILT HASKEL BOOSTERS**



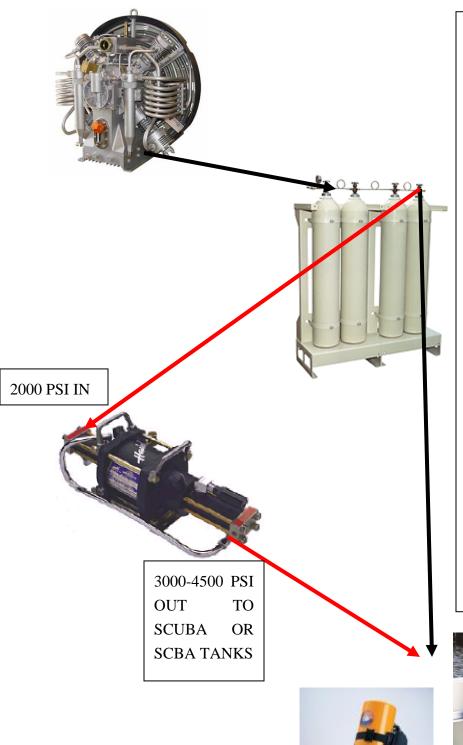
Γ

	Air	Oxygen	
Model AGD-15	\$ 2,800	\$ 3,200	
Model AG-30 (For Re-breathers			
and other O <sub>2</sub> applications)		\$ 2,200	CORE EXCHANGE
Model AGT 15-30 (Duel Piston Two Stage)	\$ 3,200	\$ 3,500	REQUIRED FOR: AGE-15 AG-30
	11		AGT 15-30

Model 26968 O2-- Full Frame Model with Instrumentation \$6,000



# HOW HASKEL BOOSTERS WORK





IF YOUR BANKS ARE DOWN TO SAY 2000 PSI, YOU WILL HAVE TO RUN THE COMPRESSOR TO FILL THE CUSTOMERS TANKS BACK UP TO THEIR RATED PRESSURE.. OR

BOOST THE 2000 PSI IN THE BANKS TO 3000 PSI FOR SCUBA OR 4500 PSI FOR FIRE DEPT. SCBA's.

THE BOOSTER WILL USE YOUR BANK-AIR FOR THE BOOST AND ALSO TO DRIVE THE BOOSTER (There is an electric drive model also) . THE SCUBA OR SCBA TANKS WILL FILL IN NO TIME.

LATER WHEN IT IS CONVIENENT, YOU CAN RUN THE COMPRESSOR TO FILL THE BANKS.

THIS SAVES THOSE BAD SHORT-RUNS ON YOUR COMPRESSOR SYSTEM.



# the AirCheck ✓ <sup>™</sup> Service

### for compressed air testing and analysis



We are pleased to offer compressed air testing services using

the AirCheck✓<sup>™</sup> method of analysis. After careful evaluation of the laboratory services offer-ed throughout the United States, we have selected the AirCheck✓<sup>™</sup> method. The most important criteria in our evaluation was accuracy and precision of the analytical techniques used. The following highlights the features of the AirCheck MM Service.

### Accuracy

The laboratory we have selected provides the following accuracy levels:

- Oxygen, Nitrogen, Condensed + 1%
- Hydrocarbons (oil) Carbon Dioxide, Total Gaseous Hydrocarbons, Methane + 2%
- <u>+</u>3% Carbon Monoxide
- Water/Dewpoint + 5%

Many other services using detector tubes for all or part of the analyses performed cannot provide accuracy levels anywhere close to those stated above. In many cases, accuracy levels are between  $\pm 20$  to  $\pm 60\%$ ! With moisture levels set at 25 ppm, this type of inaccuracy can be the difference between meeting and not meeting the air quality specification.

### Laboratory Analytical Techniques

The accuracy levels are achieved by using state-of-the-art technology which includes gas chromatography (GC), gas chromatography/ mass spectrometry (GCMS), infrared spectrophotometry, and gravimetric techniques. We have chosen a reputable laboratory that maintains strict quality assurance/quality control procedures to assure that samples are analyzed properly.

### Sample Collection

Samples are easily gathered by using equip-ment specifically designed for compressed air sampling. All sample containers are individ-ually marked and prepared for single use and eliminate the possibility of false contamination. Samples are lightweight and easy to ship to the laboratory for fast results.

Frequency of Testing NFPA guidelines recommend quarterly testing of all air transfer points to include compressors, mobile air systems, and storage banks. Texas Commission requires all paid fire departments to test on a quarterly basis from all transfer points. OSHA requires periodic testing based upon your company's written Respiratory Protection Plan.

### Reporting

Reports are easy to understand and include: your individual results, the air quality standard requirements, precision and accuracy data, as well as a statement regarding compliance. A certificate suitable for display is also provided. If a sample does not meet specifications, you will be notified immediately.

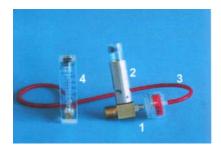
### for further information on the AirCheck ✓<sup>™</sup>Service call

# Divebase International, Inc. 850-819-4112

### Air Test Analysis:

Divebase International Inc. is an Air-Check Distributor for Trace Analytics Inc. of Austin, Texas, a certified laboratory accredited by the American Association for Laboratory Accreditation A2LA Certificate No. 322.01.





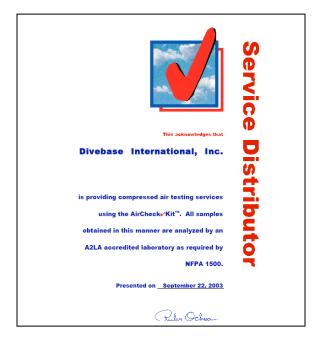
Trace Analytics is also the laboratory contracted by the Professional Association of Diving Instructors PADI Diving Retail and Resort Association to conduct air analysis for its 4000 member dive stores and resort diving locations.

We presently offer "Air Sampling Services" for all of our High Pressure Air Compressor customers.

### Air Test Example:

I have attached a sample air test from a Fire Department in Panama City. Their normal standard was for NFPA 1500 or NFPA 1989, grade-D air-specification, however, they support scuba Search & Recovery operations and therefore require the higher Scuba Grade-E air test analysis. We provide both analyses at no increase in cost.

Customers can request either grade-E for diving operations or regular grade-D NFPA 1500 or 1989 for fire departments.



E-mail	2-263-0002	Customer No.: 25 Report No.: 04				
Dwobase International, Inc. Date Ana Mr. Randy Ductrinels dbs Mexico Basch Marine HC3 Box 136 E Bands Port St. Joe FL 32456 Date file			onivod: Mon, Potruary II, 2004 wjezel: Mon, Potruary II, 2004 Mon, Potruary 10, 2004 Mol By: Randy Dudzinaki makel: Mon, January 28, 2004 mol D: Bauer, Model H25V-ED, B/N 022077			
	Highland Park Fire De		7 Grade E/C) A	r Quality Specificati	-	
			Concentratio			atta, "A"
Limiting	Characteristic	Source	Ambient	Specification		-
Oxygen, Volue	no %.	20.9	NIA	20-22	100	0.0
Etrapes / Argos	Volume %	78.2/0.9	N/A / N/A	NIA - NIA	100	0.0
Carbon Monoxide (CO), ppmv		<0.3	NA	10	100	0.0
Carbon Dioxid	ie (CO <sub>3</sub> ), pperv	391	NA	1000	100	0.2
Water (H,O), ppmv/Dewpoint, 'F		<3.4/<-91	NA	24/-65 (W)	100	0.0
Total Volatile	TVHC putates Cit.is pper	3.3	NIA	25	101	1.3
Hydrocarbon	Methane (CH.), ppmy	2.0	N/A	NIA	100	0.5
Contest (TVHC)	TVHC methoday Chil, Paperry	1.3	NA	NIA	N/A	N/A
Oil (condanse	d) & Particulate, mg/m <sup>2</sup>	0.03	NA	5	100	0.1
Odor (provideo	f by customer)	NonelSlight	NA	None/Silght	NUA	N/A
Other		NIA	NA	NIA	NIA	NVA
Customer	This sample COMPS					

# We also provide annual visual inspection services for SCBA and SCUBA tank cylinders.









**SCBA** 







# INDUSTRIAL AIR OPERATIONS SUPPORT 0- 200 PSI Systems

MILITARY AND COMMERCIAL



## PARTS AND ASSESSORIES







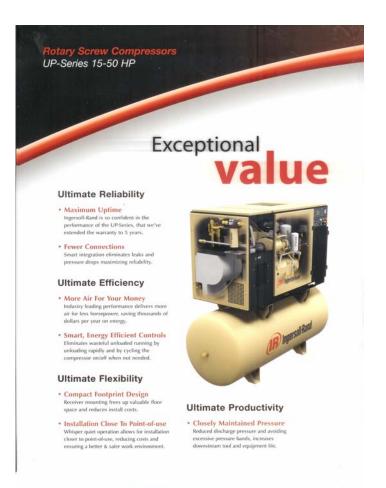




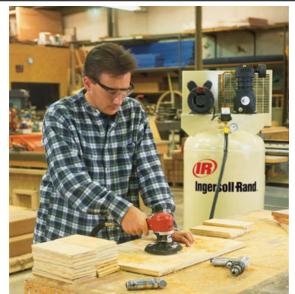






















## Ingersoll Rand.

### The Garage Mate - Portable, Single Stage Air Compressors

Ingersoll-Rand, the world's leader in air compressor manufacturing, is proud to bring industrial quality to the home, commercial and contractor trades!

Designed for professionals and serious do-It-yourselfers, the versatile Garage Mate is ideal for the home, shop, or jobsite. Delivering maximum air, the Garage Mate can power impact guns, ratchets, grinders, drills, nailers, paint sprayers, sanders and more.

When performance is defined by maximum operating pressure, increased air flow, and extended duty cycles, Ingersoll-Rand is the product of choice.

Powerful...

Maximum Air Powert More delivered air (cfm) providing the power to do the job right and in less time.

100% continuous duty for the toughest applications
135 psi maximum operating pressure

Durable... Built to Last! Durable cast iron construction • Extended Pump Lifel 5,000+ hours for years of trouble-free service • Industrial quality design

- Industrial quality design
   Portable...
   With it's ergonomically designed heavy duty handle and semi-pneumatic tires, the Garage Mate is ideal for the home, shop or jobsite
   User friendly and safe to operate
   Quiet operation. 75-80 dBA

### LEGENDARY PERFORMANCE

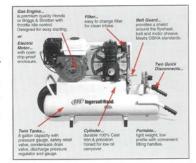
(IR) Ingersoll Rand.

- 0

### **Technical Specification Guide**

- Standard Features Oil-lube, Single Stage Wheel Barrow
- Durable 100% cast iron cylinders and frame.
  100% continuous duty cycle
- Regulated outlet provided as a standard feature
- 8 gallon capacity ASME receiver tank including pressure gauge, safety relief valve, condensate drain valve, and discharge pressure regulator and gauge.
- Totally enclosed beltguard provides a shield around the flywheel, belt and motor sheave.
   Fully assembled
- All units are prewired and thoroughly tested prior to shipment.
- Splash Lubrication
  Meets OSHA standards
- UL/CSA/ASME compliant

### Specifications ---. .



Model	Horsepower	Voltage	Capacity (acfm) @90psi/135psi	Maximum Pressure (psi)	Package Dimensions L/W/H (in.)	Net Weight (Ibs.)
SS3J2-WB	2	120 V / 240 V	5.7 / 4.9	135	43 x 18 x 25	175
SS3J3-WB	3	240 V	11.3 / 10.3	135	43 x 18 x 25	175
as Engine D						
ias Engine D Model	riven Engine		Capacity (acfm) @90psi/135psi	Maximum Pressure (psi)	Package Dimensions L/W/H (in.)	Net Weigh (lbs.)
as Engine D				Pressure	Dimensions	Weigh



contained on these pages is intended to extend any warranty or representation, expressed or implied, regarding the product described Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoli-Rand's standard terms and



Ingersoll-Rand Company Commercial and Retail Air Solutions Davidson, NC 28036

ÇAGI

# Ingersoll Rand. Single Stage Air Compressors, Electric Drive Ingersoli-Rand, the world's leader in air compressor manufacturing, is proud to bring industrial quality to the commercial and contractor trades! Designed for the professional, our 3-5HP single stage air compressors are ideal for most anyone, from the do-it-yourselfer to the professional air compressor user. When performance is defined by maximum operating pressure, increased air flow, and extended duty cycles, Ingersoll-Rand is the product of choice. Powerful... Maximum Air Power! More delivered air (cfm) providing the power to do the job right and in less time. 100% continuous duty for the Hours continuous duty for to ughest applications Higher pressure. 135 psig maximum operating pressurements. ure

- Durable...
- · Built to Last!
- Durable cast iron construction
   Extended Pump Life! 5,000+ hours
   for years of trouble-free service
   Industrial quality design
- - Reliable...

  - Reliable... Precision engineered quality components Simple, efficient, easy to maintain finger valves Extended two year warranty offered with the use of Ingersoll-Rand's All Season Select synthetic lubricant

### LEGENDARY PERFORMANCE



(IR) Ingersoll Rand.



## PROFESSIONAL AIR COMPRESSORS

Designed for the professional, our single stage air compressors are ideal for most anyone, from the do-it-yourselfer to the professional air compressor user. When performance is defined by maximum operating pressure, increased air flow, and extended duty cycles, Ingersoll-Rand is the product of choice.

- Maximum Air Power! More delivered air(cfm) to do the job right and in less time
- · Built to last! Durable Cast Iron Construction
- 100% continuous duty for the toughest applications
- · Extended Pump Life! More than double the life of many low cost aluminum compressors

### SINGLE STAGE STATIONARY - ELECTRIC

No starter required. Manual thermal overload protection of the motor. 230/1/60 Voltage.

IR Model #	HP	Voltage	Tank	ACFM@ 90/135 PSIG	Max PSIG	(JRD) Ingerseli Auni
SS3L3	3	230-1-60	60 Gallon Vertical	11.3/10.3	135	
SS5L5	5	230-1-60	60 Gallon Vertical	18.1/15.5	135	

### **PORTABLE POWER**

### SINGLE STAGE WHEELBARROW

Maximum maneuverability on the jobsite! Light weight, low profile design with convenient lifting handles.

### GASOLINE ENGINE DRIVEN

ONO CHITLE BITCHIT	a print and				19/48
IR Model #	HP	Engine	Tank	ACFM@ 90/135 PSIG	Max PSIG
SS3J5.5GB-WB	5.5	Briggs & Stratton	8 Gallon Twin	11.8/10.7	135
SS3J5.5GH-WB	5.5	Honda	8 Gallon Twin	11.8/10.7	135
ELECTRIC					
IR Model #	HP	Voltage	Tank	ACFM@ 90/135 PSIG	Max PSIG
SS3J2-WB	2	115/230-1-60	8 Gallon Twin	5.7/4.9	135
SS3J3-WB	3	230-1-60	8 Gallon Twin	11.3/10.3	135



### SINGLE STAGE AIR SLED

Ergonomically designed, the Air Sled offers a rugged frame support to meet the rigorous demands of field handling. Available options include cart assembly (lifting handle and semi-pneumatic tires) providing balanced two wheel mobility, regulation panel, hose rack and weatherproof cover. GASOLINE ENGINE DRIVEN

IR Model #	HP	Engine	Tank	ACFM@ 90/135 PSIG	Max PSIG
SS3J5.5GH-AS	5.5	Honda	8 Gallon Twin	11.8/10.7	135
ELECTRIC					
IR Model #	HP	Voltage	Tank	ACFM@ 90/135 PSIG	Max PSIG
SS3J3-AS	3	230-1-60	8 Gallon Twin	11.3/10.3	135

### SINGLE STAGE GARAGE MATE

Ideal for the home, shop or jobsite.

IR Model #	HP	Voltage	Tank	ACFM@ 90/135 PSIG	Max PSIG
SS3R2-GM	2	115-1-60	24 Gallon Vertical	5.7/4.9	135
SS3F2-GM	2	115-1-60	30 Gallon Horizontal	5.7/4.9	135

Air Power (cfm), not Horsepower, defines Compressor Performance. Not all Horsepower is rated equally! Ingersoll-Rand rates motors at applied load or running HP while many competitors are rated at peak HP (higher HP, but not necessarily more delivered air-cfm.)







# (IR) Ingersoll Rand.

## INDUSTRIAL AIR COMPRESSORS

Designed for Heavy Shop Use and Light Industrial applications, our two-stage air compressors offer:

- Superior Air Power more delivered air (cfm) and higher pressure (psi) to power your air tools
  - Durable 100% cast iron construction for the most demanding environment

### TWO-STAGE GASOLINE ENGINE DRIVEN

Ideal for fleet or field service applications with truck bed mounting design. Idle engine control and electronic ignition for easier starting. Powder coat paint finish to protect against outdoor elements. 30 gallon ASME receiver and OSHA fully enclosed belt guard for

	IR Model #	HP	Engine	ACFM @ 175 PSIG	Tank	guard for worker safety.
f	2475F11GH	11	Honda	19	30 Gallon Horizontal	
Ì	2475F11.5GKA	11.5	Kawasaki	25	30 Gallon Horizontal	
Ì	2475F12.5G	12.5	Kohler	24	30 Gallon Horizontal	
t	2475F15GIR	15	Ingersoll-Rand	24	30 Gallon Horizontal	

### TWO-STAGE ELECTRIC "VALUE PACKAGES"

Priced right and designed for the most demanding applications where a dependable air supply is required. Each package includes a two-stage cast-iron compressor pump, ODP electric motor, magnetic motor starter (mounted and wired), automatic start and stop pressure switch control, mounted on an ASME rated receiver tank. Available voltages: 230/1/60 (5-7.5 HP), 200/3/60, 230/3/60, 460/3/60. Pressure up to 175 PSIG. Oil sight glass included on 10-15 HP Packages.

IR Model #	HP	ACFM @ 175 PSIG	Tank
2340L5	5	15	60 Gallon Vertical
2475N5	5	16.8	80 Gallon Vertical
2475N7.5	7.5	24	80 Gallon Vertical
2545E10V	10	35	120 Gallon Horizontal
7100E15V	15	50	120 Gallon Horizontal

### TWO-STAGE ELECTRIC "FULLY PACKAGED"

Everything you need for a dependable air supply with minimal maintenance. Fully packaged compressors include magnetic motor starter, aircooled aftercooler and electric drain valve which removes harmful moisture, plus, the added protection of a low oil level shutdown switch. Available voltages: 230/1/60 (5-7.5 HP), 200/3/60, 230/3/60, 460/3/60.

IR Model #	HP	ACFM @ 175 PSIG	Tank
2475N5FP	5	16.8	80 Gallon Vertical
2475N7.5FP	7.5	24	80 Gallon Vertical
2545K10FP	10	35	120 Gallon Vertical
2545E10FP	10	35	120 Gallon Horizontal
7100E15FP	15	50	120 Gallon Horizontal

\* Packages available through 30 HP.

### **INGERSOLL-RAND START-UP MAINTENANCE KITS**

All the parts needed to maintain your compressor for a full year, plus the added protection of extended warranty coverage – two very distinct advantages you'll gain with the All Season Select Start Up kit. Kits include All Season Select synthetic pump lubricant and replacement air filter elements. Kits for gasoline engine driven compressors also include engine air filter, oil filter and engine oil.

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IR Model #	Compressor HF
32305580	5 & 7.5
32305898	10 & 15
32305906	20, 25 & 30
32305872	12.5 (Kohler)
32498511	11.5 (Kawasaki)
32312936	11 (Honda)

(IR)Ingersoll Rand

(IIII) Ingersoli





(R)

(IR) Ingersoll-Ba

Ingersoll-Rand







**PROFESSIONAL** 

**INDUSTRIAL** 



**HIGH PRESSURE** 





Air Solutions Group Mobile Air Center 5787 I-10 Industrial Pkwy (251)454-4832 Cell (251)639-4519 Fax Michael\_D\_Rogers@irco.com

August 1st, 2003

To: Ingersoll-Rand Compressor Customers

I would like to announce Mexico Beach Marine as an authorized Ingersoll-Rand dealer representing Panama City, Florida and the surrounding areas. Mexico Beach Marine is located just east of Panama City and is positioned to help Ingersoll-Rand not only sell, but more importantly service existing customers in this area.

Mexico Beach Marine has the capabilities to respond to your air service needs by providing mobile compressor maintenance. They also possess the ability to help in the design or replacement of your compressed air system.

Ingersoll-Rand believes that by providing the Panama City area with this type of support, we can better serve our existing customer base and work to provide our products and services to a growing regional market.

### Mexico Beach Marine Contact Informa

 Mexico Beach Marine Contact Information:

 All written correspondence to:
 HC 3 Box 136 E, Port St. Joe, Fl 32456

 Fed/Ex--- UPS---Ship to-Address:
 61 First Street, Mexico Beach, Fl. 32410

 Phone: 850-819-4112, Fax: 850-648-9175
 E-mail: MEXBCHDIVE@AOL.COM.

Sincerely,

MichaelRogers

Michael Rogers Area Manager Ingersoll-Rand Company



## WWW.CHPOWER.COM



Here are the Campbell Hausfeld Service Centers closest to you:

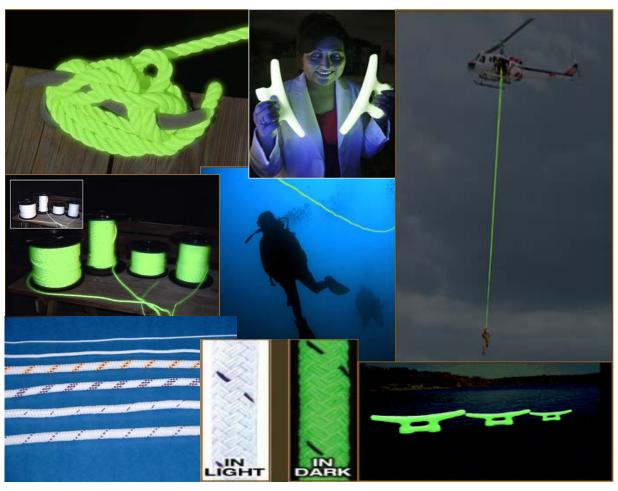


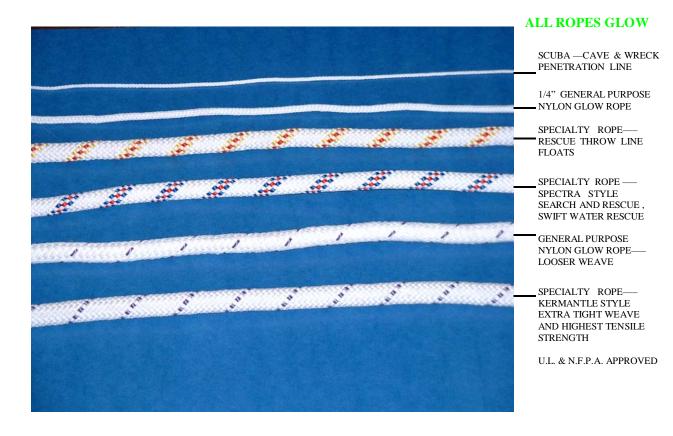


We do Mobile Warranty work for "Home Depot" Husky Compressors and "Lowes" Campbell Hausfeld Compressors.

**Compressors must have a 60 gallon tank size or larger for this service.** 







GLOW	CLEATS	T
------	--------	---

\$ 24.00 EA

\$ 17.00 EA

12 INCH CLEATS
10 INCH CLEATS



7 INCH	\$ 12.00 EA
CLEATS	

STORK\* Materials Technology

PAGE: 2 of 4 DATE: June 9, 2004

STRENGTH TESTING OF DOCK CLEATS

INTRODUCTION:

JOB NUMBER: 30160 04-60446.3

This report presents the results of strength tests conducted on samples of 12" high impact polypropylene "Glow in the Dark" dock cleats. The testing was requested by Mr. John Goedel of GloTek Corporation on May 13, 2004. The testing and data analysis were completed on June 8, 2004.

The scope of our work was limited to conducting strength tests on the samples submitted and reporting the results.

RESULTS:

Sample:	12" MarineGio Nigh Impact Polypropylene Dock Cleat			
Direction	Specimen	Peak load, pounds-force		
1-c Perallel pull thru center hole	1	4707		
	2	3896		
	3	4155		
	4	4161		
	5	4715		
	Average	4327-		
1-d: Perpendicular pull on horn near post	1	1712		
	2	1875		
	3	1728		
	4	1811		
	5	1677		
	Average	1760		
2. Perpendicular puli	1	> 5500 (tast termineted)		

### SAMPLE IDENTIFICATION:

Samples of MarinoGlo 12" high impact polypropylene "Glow in the Dark" dock cleats were submitted for testing.

Summarks what statements in this region on downed how package, planation water perchasting benchmarks provide and encoded on any expension of the statements and the memory package of the statements and the memory package of the statements of the importance of the statements of the statement of the statements of th

DIA.	CIRC.	AVG TENSILE STRENGTH	APPROX. WT. PER 100 FT.
1/4"	3/4"	2,300 lbs.	1.7 lbs.
5/16"	1"	3,400	2.7
3/8"	1-1/8"	4,900	3.7
7/16"	1-1/4"	6,500	5.0
1/2"	1 <b>-1/2"</b>	8,500	6.5
9/16"	1- <b>3/</b> 4"	11,000	8.4
5/8"	2"	15,000	11.7
3/4"	2-1/4"	19,000	15.0
7/8"	2-3/4"	27,500	21.5
1"	3"	33,000	26.0
1-1/8"	3-1/2"	44,000	35.0
1-1/4"	3-3/4"	50,000	40.0