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FLOWBENCHES

Our top-of-the-line analyzer which is capable of testing all functional parameters of modern scuba regulators including air flow rate. This user-friendly machine can quickly evaluate the following regulator functions: Air flow rates (up to 30 cu. ft./min.), inhalation / exhalation breathing efforts at both initiation and during air flow, first stage intermediate pressure, lockup repeatability and stability, and systemic air

tightness. Air flow rates through tank valves or gas manifolds can also be determined. To aid in the fine tuning of today's sensitive regulators, breathing effort readings can be examined on an expanded scale at the flip of a switch. Values to 0.1" of water column can be achieved. No dismantling of regulators is required prior to testing: Air from the second stage is injected directly into the machine through a simple, rubber cup adapter

which replaces the mouthpiece. First stage intermediate pressure is sampled through the BC hose. Each flowbench now has motor protection circuit which removes power to the vacuum motor after several minutes of inactivity. This helps prevent motor failures when the motor has been inadvertently left on. See data sheet for full specifications.



Compact Deluxe Flowbench with Double Magnehelic





48251

Compact Deluxe Flowbench with Magnehelic and Manometer

48260 Compact Deluxe Flowbench with Double Magnehelic, European Version

Portable Regulator Tester: This unique device can be used to test SCUBA regulators for inhalation / exhalation effort plus first stage intermediate pressure and lockup stability. All tests can be done without dismantling the regulator. Housed in a tackle-box like carrying case, the tester has a lift-out tray where parts and tools can be carried. This compact and portable device is ideal for field repairs, charter boat operations, classroom demonstrations, or small repair centers which do not require more elaborate equipment.

TEST EQUIPMENT



Standard Regulator / Valve Workstation:

Workstations provide controlled air pressure to a test stand where the functions of dive regulators can be checked at sea level conditions. Regulators to be examined are yoked to the test stand valve; where inter-stage pressure is transmitted to the instrumentation via an adapter coupled to the BC hose. First stage intermediate pressure, lockup repeatability and stability, and systemic air tightness can then be evaluated. A simple probe is then attached to the 2nd stage outlet while manual breathing is performed, the initial inhalation/exhalation effort (cracking resistance) can be read with high precision on a Magnehelic gauge. A unique "reading lock" device momentarily freezes the breathing effort readings on the gauge, so that values accurate to 0.1" of water column can be obtained!



Regulator / Valve Workstation with Digital Intermediate Pressure:

Similar to the 48400, but with a digital readout of intermediate pressure up to 300 psi. The pressure transducer is protected by a overpressure valve. 120-240 VAC power required. Comes with same accessories as standard workstation.



Benchtop Breathing Effort Tester: A simple, easy-to-use device for quickly testing the initial inhalation and exhalation effort of any regulator's second stage. Breathing efforts are read directly from a Magnehelic gauge reading ±2 inches water column.

48155



Benchtop Intermediate Pressure Tester:

Housed in a handsome plastic case is a 300 psi pressure gauge with 1% accuracy. A series of coupler adapters allow for attachment of different brands of BC hoses.



Digital Benchtop Regulator Tester with Magnehelic: This compact test apparatus allows several very important regulator functions to be examined with highly accurate instrumentation. This tester can check the intermediate pressure, lockup, staging integrity, and initial inhalation / exhalation of any dive regulator without any major disassembly. First stage operation can be examined by merely attaching the BC hose to the tester. To connect the various types of BC hoses, three special adapters are provided. Instrumentation features a 4.0" diameter breathing effort gauge (2" scale) and a digital readout of a pressure transducer (300 psi) for intermediate pressure, protected by an overpressure valve. Housed in a robust, aluminum, desktop style case. 120-240 VAC power required.



Benchtop Regulator Tester with Magnehelic

Housed in a robust, aluminum case, this tester is a great item for an entry level technician. Incorporates a 300 psi gauge for intermediate pressure with a 2" scales magnehelic.

TEST EQUIPMENT

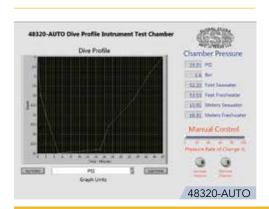


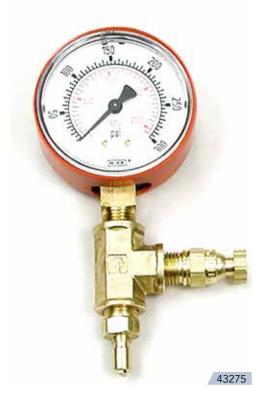
Regulator Probe: A 33" plastic tube and special rubber probe to use with Magnehelic Gauges for testing the initial breathing effort of dive regulators. The probe has two different sized ends. The small end will insert directly into many mouthpieces. If this fails, remove the mouthpiece and slip the large end over the bare flange.



Magnehelic Gauge ±5 inch scale:

Considered the standard instrument for measuring the breathing effort of dive regulators, this Magnehelic Gauge has dual, 5-inch scales to sense both positive (exhalation) and negative (inhalation) pressures. Breathing resistance is measured in inches of water column, equivocally the respiratory effort required to draw water one inch up a straw! Used with 48101 probe (not included), this is an essential addition to the dive shop repair department. Order 43302 for ±2 inch scale.





Regulator Intermediate Pressure Quick-

Tester: This 2.5" gauge attaches directly to the buoyancy compensator hose for fast checking the intermediate pressure of any regulator first stage without dismantling the unit. A manual bleeder vent allows easy cycling of the first stage to test the consistency of lockup. The regulator's second stage (or octopus) acts as an overpressure valve in case of serious staging failures. Great for field service, charter boats, and class demos.









TEST CHAMBERS

The current industry standard for testing the water-tight integrity, accuracy, and overall function of depth gauges, watches, dive computers, and certain underwater photographic gear. Each chamber is constructed with a rugged steel structure. The cogged lid with clear acrylic lens is designed for strength and ease of operation. Standard "Depth" chambers have gauges with 1% accuracy. While, "Instrument" chambers have high accuracy, 0.25% accuracy gauges. See data sheet for more details

48300 Depth Test Chamber: Reads to 230 ft of fresh water with 1% accuracy.

48305 Extended Range Depth Test Chamber: Reads to 370 ft of fresh water with 1% accuracy.

48310 Instrument Test Chamber: Reads to 300 feet of salt water with 0.25% accuracy.

48320 Extended Range Instrument Test **Chamber:** Reads to 450 feet of salt water with 0.25% accuracy.

48320-DRO Instrument Test Chamber with Digital Readout: Equipped with a high accuracy pressure transducer, this unit has less than - 0.25% accuracy on a range up to 450 feet of salt water. No more worries about converting units as the integral touch screen displays pressure/depth in the following units: pounds per square inch (psi), feet of fresh water, meters of fresh water, feet of sea water, meters of sea water, BAR, and kilopascals. The touch screen display shows date and time making it easy to record test data. A handy countdown timer is included. This can be very helpful for leak testing where a product has to be submerged at 'depth' for a given amount of time.

48301 Chamber Bulkhead Air Supply:

Connects any standard yoke style tank to the Bulkhead Air Shunt.

57136 Hoseless Computer Adapter:

A combination of a short high pressure regulator hose that accepts the computer's transducer and extends it into the chamber's water bath allowing the testing of hoseless computers in Global's Instrument Test Chambers.

48320-AUTO An advanced version of our **Instrument Test Chamber:** Computerized controls allows for complete dive profiles to be programmed. Pressure is transmitted through a 0.25% accuracy pressure transducer. See data sheet for more details.

REGULATOR ACCESSORIES

REGULATOR HOSES

Standard Low Pressure Breathing Air Hoses: These are 5/16" ID while BC hoses are 1/4" ID. Breathing Air and BC hoses are rated to 400 psi working pressure. All hoses are black with an option of yellow, available in 5/16" ID. All Global Low Pressure Breathing Air and BC hoses are assembled and tested in house. Each hose is pressure tested to twice working pressure (800psi). Non-standard fittings, such as 1/4 Female NPT are available. Same Day Turnaround on most LP hoses. Consult the price list for all standard hose configurations and options. There is a single picture called "Low Pressure End Fittings" for these items.

57075 Dry Suit Hose: A large flange on the QD makes for easy use with gloved hands. Stocked in 30" lengths only.

High Pressure Gauge / Console Hoses:

These are stocked in standard lengths and black in color. Custom lengths are available but have a 2-3 week lead time. Stocked lengths:

57136 6"

57120 30"

57130 36"

57135 40"

57137 42"

57139 48"

Gauge Console Spools:

57011 Standard

57012 Shouldered

57013 Bulletnose







BC HOSE







STANDARD MALE / FEMALE **PORT ADAPTERS**

57250 3/8-24 male to 1/4 female NPT, 400 psi service

57260 7/16-20 male to 3/8-24 female threads, 3,000 psi service

57270 3/8-24 male to 7/16-20 female threads, 3,000 psi service

57280 3/8-24 male to ½-20 female threads, 400 psi service

57210P 3/8-24 plug: Standard plug for low pressure ports, 3/8-24 thread, hex drive.



61032 Regulator Hose Multi-Port Expander;

Desc: This adapter connected to the end of a standard regulator hose swivel on our Hookah Hose or a regulator hose. It provides three standard, 3/8-24 low pressure ports. These ports can be used to connect up to three other regulator or Hookah hoses. Includes two 3/8-24 plugs as standard. Made of chrome plated brass. For Hookah applications, add the 61033 float for added buoyancy or the 61034 Hose Storage Case for storage of extra plugs and o-rings.

61033 Hookah Hose Float; Desc: A round, foam float measuring approximated 4 1/2" in diameter by 2" thick. Slide onto our Hookah hose to add buoyancy where desired. The half inch hole through the center adds for a snug fit. Constructed of cross link polyethylene foam which is much more durable that the standard Polyethylene foam used in buoy's etc..

61034 Hookah Hose Storage Case; Desc: This storage case provides a couple of cubic inches of storage for things such as LP port plugs etc... Use the included zip tie to affix to the end of the Hookah hose near the 61032 Regulator Multiport Adapter (sold separately). The lid unscrews and has an o-ring to keep things dry inside. Includes a two LP port o-rings and a zip tie.

YHK series Hookah Hose: This 3/8 bore hose is rated for 250 psi working and 1,000 burst. It's special construction creates a hose that has positive buoyancy. Standard configuration comes with a male 3/8-24, standard LP port fitting on one end with a 9/16-18 second stage swivel fitting with knurled nut on the opposite end. For single regulator or shorter hose length applications, choose the standard brass fittings. For multi-regulator or longer hose lengths, stainless steel fittings are a must. A unique design, utilizing the higher strength of stainless steel, can increase flows up to 50%. Stainless steel fitting utilize a brass knurled nut and brass ferrules. A 57255 can be ordered separately for use with an air source with a 1/4 NPT connection. Available in yellow only. Standard lengths are 25 ft. (YHK-300), 50 ft. (YHK-600) and 100 feet (YHK-1200). Consult the price list for all options and configurations.









All regulator swivels and adapters are chrome plated brass unless otherwise noted.

REGULATOR ACCESSORIES

SPECIAL CONFIGURATION **ADAPTERS**

57205 Regulator hose union: Allows 2 hoses (3/8") to be mated. 9/16-18 male (regulator 2nd stage swivel) to 3/8-24 female threads, 400 psi service

57255 1/4 npt male to 3/8-24 female, 400 psi service

57265 Extends hose-less computer transducer from regulator body. 7/16-20 threads in and out, 3,000 psi service

57275 Converts male thread on gauge/console hose to pipe thread. 7/16-20 female to ¼ male NPT threads, 3,000 psi service

57300 BC coupler male stud to male 1/4 npt. For putting air guns, tire inflators, etc. onto BC hoses. 400 psi service

57305 Converts regulator hose 2nd stage end to ¼ npt male threads, 400 psi service

57205

BC HOSE ADAPTERS

Converts the 2nd stage swivel end (9/16-18) of a regulator hose to a BC QD.

57350 Standard

57351 Mares / Scubapro

57352 US Divers / Apex / Zeagle











57255

57275

57305



REGULATOR SWIVELS

Standard 90° configuration swivels.

57140 3/8-24 threads in and out. 3,000 psi service

57155 1/2-20 threads in and out, 400 psi service

57190 7/16-20 threads in and out, 3,000 psi service

57195 3/8-24 male to 7/16-20 female threads, 3,000 psi service

57200 3/8-24 threads in and out, 400 psi service

57215 High pressure 90° swivel with extra port. One 7/16-20 male to two 7/16-20 female threads, 3,000 psi service.

57210 Low pressure swivel with extra outlet ports. One 3/8-24 male to three 3/8-24 female threads, 400 psi service.















HOOKAHROO



61006 Hookahroo Travel:

Hookahroo Travel W/ Dive Flag. Portable surface supplied air floating platform. Accommodates cylinders up to 130 cuft.



61008 Hookahroo Travel Complete for Single Diver:

Hookahroo Travel complete dive system (less cylinder) Travel, Dive Flag, 30 foot diver hose, first and second stage regulator, Mini PSI Gage and Diver Harness. Accommodates cylinders up to 130. cuft. Tank shown not included.



61007 Hookahroo Resort:

Hookahroo Resort W/Dive Flag. The ultimate portable surface supplied air floating platform. Accommodates cylinders up to 130 cuft.



61002 Hookahroo Resort Complete for Single Diver:

Hookahroo Resort complete SINGLE DIVER system (less cylinder) Resort, Dive Flag, One 30 foot diver hose, first stage regulator, one second stage, Mini PSI Gage and one Diver Harness. Accommodates cylinders up to 130 cuft. Tank shown not included.



61018 Aqua Reel: Simply attach a second stage regulator to the diver end and a first stage to the surface end and you have an extremely compact surface supplied diving system. Aqua Reel comes with 80 feet of diver hose and measures L12" x W

18" x H 12" with handle.



61019 Easy Haul Tank Handle:

This nifty device straps to a tank giving it a great carrying handle. It can be strapped to an optimal position which makes for a balanced load that is easier to haul.



61022 Hookahroo Chest Harness: Surface supplied air hose easily attaches to this harness eliminating any pulling

harness eliminating any pulling on the second stage regulator for diver comfort.

*Additional Hookahroo Products Available Online.

REGULATOR TOOLS

43110 Stainless Steel Metal Parts Brush

43120 Nylon Bristle Parts Brush

43125 Regulator Hose Brush:

A special, small-diameter brush with a 30" handle for scrubbing the interior of regulator 2nd stage hoses.

Stainless Steel O-Ring Probes:

43130 Style #3

43140 Style #5

43141 Style #6

43150 Style #7

43155 Stainless Steel O-Ring Insertion Tool: A special stainless tool with two bulbous, offset ends with one side ground

flat. Handy for pushing /pulling O-rings into recessed grooves like those inside regulator bodies.

43160 Stainless Steel Locking Hemostat Pliers: The perfect tool for replacing regulator exhaling valves without removing the exhaust tube; great for manipulating small

43165 O-Ring Tool Kit: Set of 5 stainless micro-probes for removing or pushing gaskets and O-rings.

parts like 2nd stage levers.

43175 Macro-probe Set:

Set of 4 robust probes useful for probing / removing large O-rings, gaskets, or valve seats.

43185 Poseidon 2nd Stage

Tool: Unique pliers which can reach into the mouthpiece tube of the Poseidon 2nd stage and turn the adjusting cam which

sets the activation effort. The tool grips the cam snugly and allows slow, stepped rotation of the knurled roller.

43240 Spanner Face Wrench:

A "V" shaped wrench with hardened tips in each arm for engaging the detent holes in regulator high-pressure seat retainers, body end caps, or screw out second stage cover plates.

43245 Heavy Duty Face

Spanner: A robust tool with articulated arms and screwin, replaceable tips. For replacement tip: Order #43246.

43250 1/8" Cap Spanner

Wrench: A wrench with an articulated, semi-circular arm containing an 1/8" pin for engaging / removing the piston caps on many regulators. Will handle caps from 3/4" to 2" in

diameter. For 3/16" pin: order #43260

43290 Regulator Piston Bullet:

Protects small piston chamber O-ring from being cut while inserting regulator piston into body. Piston not included.

43330 Regulator Air Barrel

Reamer: A stainless steel brush used in an electric drill to clean / polish the inside of the second-stage air inlet barrels.

43340 Regulator Service

Multi-Wrench: This unique tool will perform the tightening / loosening / removal operations on the following regulator parts: first stage piston caps, first stage yoke-retaining nuts or air-inlet bodies, detented hi-pressure seat retainers, detented body ports and detented second stage poppet chamber ports.









43340

O-RINGS

Global stocks most popular sizes of commonly used O-rings in both Buna N (black nitrile rubber) for normal air applications and Viton (oxycompatible fluorocarbon rubber) for mixed gas, oxygen or certain other specialty gas mixtures. They can be ordered singly in any quantity, in handy bulk jars of 50 each or in kits containing a variety of commonly used O-rings. To order bulk jars, add "-BP" to the end of the O-ring part number (i.e. 48507-BP). The most common O-ring applications are listed below. See the price list for an exact size match chart.

48500 O-Ring Starter Kit:

A kit containing 12 each of 18 different O-rings, that are commonly used for servicing scuba equipment. Kit comes as a compartmental plastic box with a guide that defines important uses for each seal. A great product for shops opening a service department, but unsure of just which O-rings to stock. See application chart for O-rings included in kit.

490000X Viton O-Ring Kit:

A starter kit of popular, color-coded, oxy-compatible O-rings in a plastic compartment box. All Global Viton O-rings are brown to prevent accidental mix-ups with the usual black, Buna N O-rings so plentiful in scuba repair departments. Kit has six each of 10 commonly used O-rings. See application chart for O-rings included in kit.







O-RING APPLICATION GUIDE

Buna N Part #	Viton Part #	Application	48500 Kit Quantity	49000OX Kit Quantity
48503	49003OX	Air spool O-ring for dive consoles or submersible pressure gauges - internal swivel seal	12	6
48506	49006OX	Common seal in regulator first stage balancing mechanisms	12	
48507	49007OX	Common hi-pressure seal on many regulator pistons	12	6
48508	49008OX	Hi-pressure seal on certain oversized pistons; various regulator & valve uses	12	
48510	49010OX	Regulator hose swivel internal O-ring; valve stem seals; piston barrel seal; power inflator seal	12	6
48511	49011OX	Regulator hose, male end; regulator LP port plugs; various hose adapters; internal seal on many BC hoses	12	6
48512	49012OX	Console/pressure gauge hose; HP port plugs & adapters; DIN fitting internal seal; regulator filter seal	12	6
48513	49013OX	Piston seat seals; Survivair manifolds; power inflators	12	
48514	49014OX	2nd Stage inlet fittings, J-regulators	12	
48515	49015OX	First stage seat seal; valve bonnet seals	12	
48516	49016OX	Old 1/2" NPS valves; 2nd stage inlet fittings; SAS LP seats; J-regulators; HP module seal	12	
48517- 48522	49017OX- 49022OX	Large piston O-ring on various regulators	48517 (12) 48522 (12)	49022OX (6)
48523- 48525	49023OX- 49025OX	Piston / swivel cap seal on various regulators	48525 (12)	
	49110OX	Seal in quick couplers (Global #45510OX & 45515OX)		
48611	49111OX	Mates regulator to valve in Australian valves; seal on helium gas nipples (Global #45265OX)		
48612	49112OX	Regulator to tank seal for older tanks (1970's & earlier); DIN fitting to tank seal	12	6
48616	49116OX	Tank to valve seals for hi-pressure tanks (3,500 psi +)	12	6
48714	49214OX	Common tank to valve seal (3/4-14 NPS neck thread)	12	6
48814	49014OX	Mates regulator to most tank valves	12	6

OXY-CLEAN

LUBRICANTS AND SEALANTS

42135OX Christolube 125: Commonly used on Nitrox / Oxygen tank valve threads where silicone grease CANNOT be used. This black, oxy-compatible grease contains molybdenum disulfide, a highly effective additive to prevent thread seizures and dissimilar metal electrolysis, while still maintaining a high degree of lubricity. Sold in 2-oz. plastic jar.

42165OX Oxy-Safe Regulator Lubricant:

Christolube MCG111 is a synthetic, perfluoropolyether lubricant, one of the most inert materials known. Does NOT get viscous at low temperatures and works well in regulators used in cold waters. Navy approved. 2 oz. tube.

42144OX LOX-8 Oxygen Compatible

PTFE Paste Sealant: Various components of common scuba equipment such as regulator second stage inlets require thread locking sealants that are O_2 compatible. This greenish-colored fluorocarbon is fully O_2 compatible in a 25 gram jar. Order 42145OX for 100 gram jar; 42146OX for 100 gram plunger.

42147OX LOX-8 Oxygen Compatible

PTFE Grease: Similar to LOX-8 paste, except in a thinner formulation. LOX-8 grease is an oxygen compatible PTFE grease suitable for 1st and 2nd stage regulator rebuilds, tank valves and O-rings in a 25 gram jar. Order 42148OX for 100 gram jar, 42149OX for 100 gram plunger

42155OX PTFE Tape / O₃ Compatible:

Not all PTFE tape is truly oxy-compatible, Global tape meets military specs for the manufacture and composition of an oxy-safe material. ¼" wide roll.

42143 Forumla-8 PTFE Paste: A thread sealant with advanced properties making it shear sensitive and a great fit for sealing pipe threads. A suitable replacement for using thread sealant tapes. 3.5 ounce tube.

43210 Dow 111 Silicone Grease: A thick formulation with high wash-out resistance is suitable for lubricating and/or sealing static (non-moving) parts. Also recommended by cylinder manufacturers to coat tank valve threads at each VIP to prevent electrolytic corrosion. Do not use on moving parts.

43220 Dow 7 Silicone Grease: A grease with thin consistency for use on moving regulator / valve parts such as piston O-rings.















NOTE: NO Silicone lubricant is suitable for Nitrox or pure oxygen applications.

ULTRASONICS

Perhaps the most effective way to clean small parts including those from scuba regulators / valves is by ultrasonics. This requires a special machine which generates high frequency vibrations (beyond the range of human hearing) within certain liquid solvents. Forceful bubble impulsions bombard virtually every surface of any material submerged in the liquid; this cavitation literally blasts the contaminants off the parts, producing a state of microscopic cleanliness!

43050 Deluxe Ultrasonics Cleaner Model 140: This top of the line 110v, powerful (95 watts) machine measures 10.3" x 6.5" x 8.3" overall with a 9.4" x 5.4" x 4.0" stainless steel tank of 3.4 qt. capacity. Controls include automatic cavitation tuning, cycle timer, and a pilot light. Order 43052 for 220 volt version

43051 Stainless Steel Basket for 140: This metal mesh basket holds parts during ultrasonic cleaning and rinsing.

43055 Stainless Steel Pan for 140: This pan can hold the desired solvent in the

interchangeable pan / solvent systems.

43070 Ultrasonic Cleaner

Q-90: This handsome 110v (55 watts), rectangular shaped unit is 7.0" x 6.4" x 8.8" overall with a two qt. tank measuring 5.9" x $5.4" \times 4.0"$. It has an automatic timer and pilot light. Order 43072 for 220 volt version.

43071 Stainless Steel Basket for Q-90

43075 Stainless Steel Pan for Q-90

43090 Bur Tray: A small, cupshaped tray with a handle for cleaning small parts.

GLOBAL HYDROSONIC SOLVENT

Most commercially available (and expensive) solvents for sonic cleaners were developed for use on jewelry, dental materials, or greasy bearings; they work poorly on salty scuba gear! Global's solvent, based on a food-grade organic acid, was especially designed to remove the deposits which contaminate dive gear. Will not harm cleaner pans. A concentrated form is now available. One 16oz bottle of concentrate can be mixed with water to make 1 gallon of regular strength Hydrosonic Solvent. Ships HAZMAT at an additional cost. International HAZMAT shipping now available to select locations. Contact Global for more information.

Normal Strength:

43101 1 Gallon

43103 1 Case of 4 Gallons

Concentrate:

43105 16 oz concentrate, qty. 1

43107 16 oz concentrate, qty 2+

Did you know?

ULTRASONIC OXY-CLEANING

Ultrasonics may be the simplest and most effective technique for oxygencleaning. It's easy: Use alkaline degreasers like Global Special Cleaner diluted 1 to 25 (6 oz per gallon of water) in the ultrasonic machine. Add the "dirty" parts and energize for 15 minutes. Rinse with oil-free water, conduct shake / pH test, dry appropriately, and inspect with ultraviolet light or other approved methods. Extremely dirty materials may require pre-treatments prior to sonic cleaning.















43101



43105

TANK CLEANING

42000 Tank Tumbler: The long held standard for Tank Tumbling from Global. Holds two tanks with adjustable spacing for different tank diameters. The new motor tumbles at approximately 25 rpm and now has an integrated on/off switch and power cord. Call for 220 volt motor option.

42030 Tank Dryer: This apparatus can hold two dive tanks in an inverted position so that they can be dried after tumbling by forced hot air. Includes two tank stands, an air delivery pipe with two outlet ports, and an industrial-grade heat gun. Has a small diameter heat riser for use with ½" tank valve openings. Order 42035 for heat gun replacement element.

42020 Tank Draining Stand:

A sturdy 3-legged steel frame holds SCUBA cylinders up 8.25" in diameter in an inverted position so that after tumbling, media and cleaner can be drained from them into a receptacle.

42120 Tank Washer: Streams water inside tank up 8.25" in diameter for washing / rinsing purpose. Has a simple garden hose style connection.

42121 Tank Washer Upgrade

Kit: Adds tank washing capability to the 42020 Tank Draining Stand. Can be installed in the field.

42080 Tank Vise: Clamp tanks up to 8.5" in diameter in this sturdy vise. Rubber pads and a

plastic chain cover protect tank finishes.

42040 Aluminum Oxide: Chips are small, hard, randomlyshaped abrasive particles which will loosen scale and rust from tank walls, thereby augmenting the action of solvent chemicals to remove / suspend internal contamination. This material can be used in steel or aluminum tanks with various adjunct solvents, EXCEPT TANK ACID, which will attack the chips and produce excessive gassing. Aluminum oxide has been successfully used for tank tumbling for 40 years. Use 25 -35 lbs. per tank.

42045 Glass Beads: Beads are 4-5 mm clear glass balls which are employed whenever minimal cutting activity is required during oxy-cleaning for Nitrox usage or for removal of persistent internal tank odors. Will not remove heavy, gross contaminants. About 10 pounds are generally required per tank.

42050 Ceramic Media: Chips are cylindrical, cast resin pellets with a computer-designed shape for specific cutting activity. Each pellet (1/8" ID x 5/16" long) contains an abrasive agent which gives a very precise, predictable cleaning action. More tolerant of acid than aluminum oxide, ceramics are very useful for tumbling aluminum tanks or for oxygen-cleaning operations. Use 25 - 35 lbs. per tank.

42055 Tumbling Expeditor: A fine, sand-like abrasive grit which speeds the cleaning activity of normal media in STEEL tanks and

usually shortens the tumbling process by several hours. Also enhances the cleaning of very dirty cylinders with pitted or concreted walls. Requires only 2-3 teaspoons of grit per tumble. Sold by the pound.

42170 Tank Cleaning Whips: An essential device for LIGHT DUTY cleaning inside scuba tanks when tumbling is not needed, but deposits like flash rust or aluminum Bayerite should be removed. The whip can be spun by any 3/8-electric drill. Order 42175 for small tanks and pony bottles.

42171 Whip Extender Rod: 36"

42200 Plastic Whip Guide:

helps stabilize whip when screwed into a tanks valve port. ¾ NPS threads.

42225 Tank Purge Air Gun:

Blast debris and media out of a dive tank after tumbling. Comes with standard BC QD stud.

42205 Genesis Tank Plug:

A metal plug with a 7/8 - 14 thread and O-ring seal for use in tumbling.

42210 Standard Tank Plug: A plastic, O-ring sealed plug for use in common 3/4 NPS tanks during tumbling.

Tank Neck Thread Brushes:

Cylindrical Plastic handled brushes with fine stainless steel wire for cleaning dive tank neck threads without harm to the threading.

43020 Tank Neck Thread Hand

Brushes: Plastic handled brushes with fine stainless steel wire for

cleaning of $\frac{34}{4}$ NPS tank neck threads. Order 43030 for $\frac{1}{2}$ NGT and DIN tank thread sizes

43025 Tank Neck Thread Drill

Brush: A small, cone-shaped stainless steel brush which can be used in any electric drill to safely and quickly clean tank neck threads and the O-ring groove.

43040 Light-Duty Bottom

Brush: Special, small stainless fine wire brush for light rust spots in steel tanks or Bayerite deposits in aluminum models. Will not seriously damage the interior coating of aluminum tanks. Comes standard with 36" extension rod. Order 43041 for replacement brush only.

43045 Heavy-Duty Bottom

Brush: Special, small stainless brush with heavier, stiffer wire for bottom flash rust or other deposits in STEEL tanks. Not recommended for aluminum models. Comes standard with 36" extension rod. Order 43046 for replacement brush only.

42110 Tank Inspection Swivel

Mirror: A 7/8" diameter magnifying mirror with handle used to inspect the inner neck of aluminum tanks for cracks or imperfections. A ball joint between the mirror and handle allow the viewing angle to be adjusted.

42095 Deluxe Tank Internal Inspection Light: An array of high-intensity, miniature LED's housed within a 14" clear plastic tube which will slip into even narrow necked tanks. Uses stand 110 VAC power.

42098 Deluxe Inspection Light with Potentiometer: This light
is the same as the 42095 but with
a potentiometer to adjust light
intensity. At times, the glare from
too much light can make visual
tank inspections more difficult.







OXY-CLEAN

VALVE SERVICE

Valve Thread Brushes

43000 Valve Thread Brush:

Small circular stainless steel wire brush used to quickly clean the threads of ¾ NPS scuba tank valves. Order 43010 for ½ NGT and DIN tank thread sizes

46080 Valve / Regulator Test

Stand: An aluminum cylinder that accepts ¾ NPS cylinder valves for testing. A ¼ NPT female port on the bottom allows the valve under test to be pressurized up to 4,500 psi. Has two 1/4-20 holes on the bottom for bench mounting.

43280 Valve Function Tester:

A three foot long, high pressure hose with a yoke on one end opposite the Valve/Regulator Test Stand. The hose allows the valve to be submerged in water



for leak testing.

43281 Genesis DIN Valve

Adapter: Converts the 7/8-14 Genesis / DIN valve thread to 34 NPS for test purposes. Works great in the 46080 Valve / Regulator Test Stand.

43360 Valve Stem Nut Tool:

A screwdriver with a special tip for removing the slotted retainer nuts on the handles of many scuba valves, include our 46330 line valve.



CLEANING SOLUTIONS

42070 Acidic Tank Cleaner: A

blend of phosphoric acid and certain suspending agents, this acidic cleaner will expedite the removal of scale, oxides, concretions and other stubborn contaminants from inside STEEL dive tanks. It's biodegradable and can be flushed down drain systems without harm. It has FDS, USDA, CDA, CDF approval and meets many milspec requirements. The acid concentrate, when diluted to 5 - 10% strength for use, will speed the process so that only 1-3 hours will be required for completion. NOTE: Use this



cleaner on STEEL TANKS ONLY; acids will attack aluminum models! Sold by the gallon. HAZMAT shipping required at additional cost.

42075OX Oxy-Safe Citrate

Tank Cleaner: Prior to Nitrox / O₂ usage, visibly dirty or rusty dive tanks require abrasive tumbling prior to any degreasing treatment. Tumbling with ceramic media and citric acid (citrate) cleaner usually gives excellent results. This non-toxic, unregulated substance is great for oxy-cleaning processes. Global cleaner is diluted 1 oz. per gallon of water for actual use. Sold by the gallon.

421000X Global Special Cleaner Clear: This alkaline

degreaser is biodegradable,

nontoxic, nonvolatile and possesses high rinse-ability: a highly desirable property for oxygen cleaning. It's compatible with steel, stainless, brass, chrome, ceramics, galvanized metals as well as most rubber and plastic polymers. (In concentrated form, it can etch aluminum). Use this degreaser diluted with water as an adjunct in tank tumbling, for swabbing compressor oil spills, or for oxygen cleaning. Because of its high rinse-ability and negligible flash point, this solvent is very effective for oxygen cleaning by soaking, scrubbing, or ultrasonic methods. Sold by the gallon.

42220OX Oxy-Safe Rust Inhibitor: Also called Compound O, is used following the tumbling

Did you know?

Global can ship **HAZMAT** products internationally. Contact us for more details.

of steel tanks to prevent flash rust, a reddish film which often forms on the interior walls during drying of the cleaned cylinder. Compound O can be used for both air and O_2 / Nitrox tanks.

43190 Regulator Cleaner

Solvent: A biodegradable, acidic detergent which removes oxides, tarnish, rust, scale, oil, and salt-water deposits from brass, iron, stainless and plastic parts. This solvent meets FDA, USDA, and various mil-spec requirements. The acid can be diluted to about 25% strength; at that concentration, most scuba parts will be cleaned by a 3-15 minute soaking. For heavy encrusted items, the cleaner can be applied full strength directly with a brush or swab. Rinse the finished parts with cold, then warm water and dry thoroughly. A metallic luster can be produced on many clean parts by wiping them with a towel. DO NOT USE IN ULTRASONIC CLEANING MACHINES; it can corrode / etch the tank or damage the circuitry. HAZMAT shipping required at additional cost. Sold by the quart. Order 43191 for gallon size.











3D CAD DESIGN



BUILD FROM DESIGN





Global can satisfy all of your breathing air filtration needs. Whether its individual components such as towers, separators, filter cartridges, priority valves or complete systems, Global has everything you need. All systems are specified and designed based on specific requirements such as flow rate, desired air quality output etc.. Once the proper components are determined, the system is modeled in 3D CAD software. This allows for a full understanding of what the system will look like, as well as its dimensions before anything is purchased or built. The above example of a Grade E system demonstrates how the actual build of a system exactly matches the 3D CAD design. The above system is for demonstrative purposes only. Each system has unique requirements. Contact Global to discuss your requirements.

Global offers a wide variety or air filtration products suitable, not only for making Grade E air, but Oxygen Compatible Air as well. From towers to moisture separators to filters, Global has it all.

44130 After Separator: Also called a coalescer, this 3.75" x 11" tower fits between the compressor and chemical towers to mechanically dry the air to about 99%. The life and effectiveness of chemical filters are greatly improved when using dry air. A manual vent on the bottom of the column allows the oil / water sludge to be periodically drained off with the #44135 Drain Valve accessory (order separately). Order #44133 for seal kit.

44140 Short Filter Tower:

Measures 3.75" x 16" and uses a 10" disposable cartridge. Made of 7075 aluminum alloy for 5,000 psi service. The screw-off end caps make replacing the cartridges a swift, simple task. Filters roughly 12,000 cu. ft. of air per cartridge. See price list

for cartridges. Order #44154 for seal kit.

44150 Tall Filter Tower:

Measures 3.75" x 33" and uses a 27" disposable cartridge. Made of 7075 aluminum alloy for 5,000 psi service. The screw-off end caps make replacing the cartridges a swift, simple task. Filters roughly 22,000 cu. ft. of air per cartridge. See price list for cartridges. Order #44154 for seal kit.

44160 Purifier Combination

Tower: Measures 3.75" x 24" and contains BOTH a coalescer and space for a 13" filter cartridge. Use on small compressors (10 cfm or less) or to bolster existing filter systems. See price list for cartridges. Drain valve NOT included (see #44135). Order #44154 for seal kit.

44300 Tall Repackable

Stainless Canister: Substantial savings can be had by repacking one's own filter cartridges with bulk air processing chemicals. Fits only Global #44150 Tall Filter Tower and those using the Mako seal system. Includes

complete instructions on the repacking process. For replacement pads, plates, and shields, Order kit #44301.

Did you know?

DISPOSABLE FILTER CARTRIDGES

Global offers a series of throwaway filter cartridges for a variety of popular air systems as well as our own towers. Some filters offer different combinations of chemicals. Be sure to select properly for your application. See the GSMoT price list for further information, stock numbers, and a cross-reference chart on the filters offered.

44305 Bauer Tower Converter:

A stainless steel insert that converts Bauer's double O-ring mating system into the more common single O-ring type. Converted Bauer towers accept Mako-style cartridges that are less expensive and easier to procure. Also accepts the Global Tall Repackable Canister (#44300) in the proper height tower.







HARDWARE

44135 Drain Assembly Kit for #44130 / 44160 or other appliances requiring a sludge drain: Valve with 1/4" NPTM inlet and six feet of plastic tube that runs to a collection vessel or other depository.

44155 Tower Port Adapter: Converts #6 straight thread O-ring ports common to many filter towers to 1/4 NPT female (Stainless steel).

Valve: Creates a back pressure of roughly 1,700 psi on the filter system. This increases the air density and thus the efficiency of the after separator. Thus, the air passing through the filters is dryer maximizing their life expectancy. Has one inlet and two outlet ports, all ¼ NPT female. A musthave for your filter system.

46320 Standard Relief Valve:

Adjustable "pop-off" valve which can be calibrated from 300 to 5,500 psi. Anodized aluminum for 6,000 psi service. 1/4" NPTM inlet. Used to protect filters, separators, storage vessels or compressor inter-stages. Comes uncalibrated with instructions.

46340 Floater Relief Valve: A gently-opening pop-off valve producing a slowly increasing flow rate to use as a safety overpressure device where repeated openings occur. Designed for heavy frequent service to 7,000 psi. 1/4" NPT male inlet. Can be adjusted from 400 to 6,500 psi; comes uncalibrated with instructions.

44070 Colorimetric Air Quality

Monitor: This simple device monitors both the carbon monoxide and moisture level of filtered breathing air. A blue ring monitors humidity turning from blue to pink in color at approximately 40% humidity. A yellow, round disk turns black at approximately 50 ppm of carbon dioxide. A high strength aluminum body is rated for 5,000 psi and can flow up to 50 cfm. Connections are ¼ npt female. Order #44071 for replacement CO disk and humidity

ring; #44073 for replacement humidity ring only; #44077 for replacement CO disk only.

Level Monitor: Uses the same body at the 44070, but contains a three phase sensor disk measuring humidity only. Humidity levels of 20%, 40% and 60% are displayed. Does NOT monitor carbon monoxide. Order 44076 for replacement sensor disk.

44010 Activated Alumina Type

A: Porous aluminum oxide is a popular desiccant for SCUBA air because it is nontoxic, long lasting, compositionally stable, simple to handle, and has high absorption capacity. Primarily used to remove moisture. 1/8" diameter spheres. packaged in a gallon bottle weighing about 6.75 lb.

44040 Steam Activated Carbon:

A specialized form of charcoal, this final filtering agent removes tastes and odors from the air. It absorbs oil and water vapor, chlorine, nitrous oxide, and small amounts of carbon monoxide and dioxide. Must be the final filtration step requiring very dry air. Packaged in a gallon bottle weighing about 3.75 lb.

44050 Molecular Sieve 13X: Part of a group of space age chemicals known as zeolites, that have outstanding filtration abilities. This is a highly effective filtrant for moisture, nitrogen oxide, oil vapor, and limited amounts of carbon monoxide and dioxide. Variety 13X is the best formulation for processing divers' air because it is designed to trap water vapor. Packaged in gallon bottle weighing about 6.5 lb.

46119 Inline Filter: This 6,000 psi filter has a sintered element for removing tiny particles (30 micron) from any air stream. Since the regulators in Flowbenches and Haskel pumps conduct enormous air flows, their seats can be damaged by even microscopic particles; use this filter to protect such important equipment. Aluminum body with 1/4" NPTF input port & 1/4 NPTM outlet. For rebuild kit order #46122.



46119

COMPRESSORS

COMPRESSOR OILS

Global offers a variety of compressor oils. Whether you have an older unit with high hours or one that is brand new, we have the oil to meet your needs.







44085



44095





Cleaner Concentrate: Make this part of your normal compressor oil changes. This cleaner helps remove varnish and other contaminants which don't normally come out in just an oil change. Ships in a one quart bottle.

44080 CF-500 Blended Semi-Synthetic Oil:

As in the automotive industry, blended oils are now impacting the dive industry. A step up from pure petroleum lubes, this product has a high viscosity index and flash point, low carbon formation and high lubricity. An improved oil for older compressors not suited for full synthetics. Also a fine break-in oil. Gallon Bottle.

44085 CF-1000

Synthetic Oil: Within the class of diester-based lubricants, this broadspectrum product is a field-proven, equivalent substitute for such oils as the original Anderol 500 & 750, Chemlube 501 & 751, and other popular oils for breathing air compressors. Diester oils are so stable and oxidation-resistant that once-a-year oil changes have become commonplace. Carbon residues from these lubes are minimal and easily removed. Their high flash point (around 500° F) prevents explosive accidents. Because of its viscosity characteristics, this oil is suitable for use in both new and older machines and is recommended worldwide by various compressor manufacturers. Gallon bottle.

44095 CF-2000 Synthetic Oil: A fairly new lubricant in the diving world, this polyalphaolefin-based oil has become very popular for Nitrox production because of its high resistance to oxidative breakdown. Synthesized with foodgrade components complying with FDA H-1 specifications, this translucent fluid has very low volatility, high hydrolytic resistance, no toxicity, and a high flash point. It has seen wide spread use in modern compressors, especially for Nitrox continuous blending operations. Like most synthetics, it has an extended shelf life. Gallon bottle.

44100 CF-8000

Synthetic Oil: The latest state-of-the-art product, this triester-based oil was developed specifically for severe, high temperature conditions commonly endured by breathing air compressors. This product incorporates all the great features of diester based oils, as well as the highest flash point, thermal resistance and self-cooling characteristics available. Recommended wherever severe operating conditions are encountered. Gallon bottle.

AIR FILLER WHIPS

Global produces scuba filler whips using our exclusive high pressure certified thermoplastic hose rated for 5,000 psi working pressure and 20,000 burst. Each filler whip has a 5 foot long hose with ¼ npt male end, a line valve and bleeder screw on a chrome plated brass bleeder block included as standard. These whips are for air use only, see the mixed gas section on page pages 32 and 33 for oxygen compatible whips.

45145 Standard Yoke Filler Whip: Fits a standard yoke, 3,200 psi service. Order #45157 for right angle version.

45150 Deluxe Yoke Filler Whip: Fits a standard yoke, 3,200 psi service, has a 5,000 psi oil filled gauge.

45180 Standard DIN Filler Whip: Fits a standard 300 Bar DIN fitting. 4,500 psi service. Order #45158 for right angle version.

45151 Deluxe DIN Filler Whip: Fits a standard 300 Bar DIN fitting. 4,500 psi service, has a 5,000 psi oil filled gauge.

45195 DIN / Yoke Converto Filler Whip: Standard end is a 300 Bar DIN fitting for 4,500 psi service, but includes the #45188 converter. The converter screws onto the DIN fitting and converts it to a 3,200 psi service end for a standard yoke.

45175 Hi Pressure SCBA Filler Whip: Has a stainless steel end adapter/bleeder which fits fire/rescue (SCBA) tanks. Compatible with CGA 346 & 347, 4,500 psi service. Order #45016 for replacement seal.

45178 Deluxe Universal Filler

Whip: Combines the three most popular fills in one whip. Standard is a 300 Bar DIN fitting with screw on adapters for Yoke and CGA 346/347/SCBA. Yoke service is rated for 3,200 psi, DIN & CGA adapter is rated for 4,500 psi. Order #45179 for right angle version.



TANK FILLING ATTACHMENTS

Global produces tank filling attachments for a variety of connections. Most are chrome plated brass, except where noted. All yoke attachments are rated for 3,200 psi and DIN is rated for 4,500 psi (300 Bar). Each comes with and integral bleeder unless otherwise noted.

45050 Standard Yoke Filler: Fits a standard yoke, 3,200 psi service and has a $\frac{1}{4}$ NPT female inline connection port. Order #45050OX for O_a /Nitrox Version

45026 Right Angle Yoke Filler: Fits a standard yoke, 3,200 psi service and has a ¼ NPT female right angle connection port. Order #45026OX for O₂/Nitrox Version

45055 Ported Standard Yoke Filler: Identical to #45050, but includes a 1/4" NPTF gauge port. Order #45055OX for O₂/Nitrox Version

45056 Ported Standard Yoke Filler w/gauge: Adds a 5,000 psi gauge to a #45055. Air version includes an oil filled gauge. Nitrox version includes a dry, oxy clean gauge. Order #45056OX for O_2 / Nitrox Version

45183 Standard DIN Filler: Fits a standard 300 Bar DIN fitting, 4,500 psi service and has a $\frac{1}{4}$ NPT female inline connection port. Order #45183OX for O_2 /Nitrox Version

45027 Right Angle DIN Filler: Fits a standard 300 Bar DIN fitting, 4,500 psi service and has a ¼ NPT female right angle connection port. Order #45027OX for O₂/Nitrox Version

45059 Ported Standard DIN Filler: Identical to #45183, but includes a 1/4" NPT female gauge port. Order #45059OX for O₂/Nitrox Version

45058 Ported Standard DIN Filler w/gauge: Adds a 5,000 psi gauge to a #45059. Air version includes an oil filled gauge. Nitrox version includes a dry, oxy clean gauge. Order #45058OX for O_2/V Nitrox Version

45015 SCBA Filler Converter: Allows for connection to CGA 346/347/SCBA. Includes bleeder and in line ½ NPT female connection. 4,500 psi service. Stainless steel construction. Order #45016 for replacement seal.

45090 Yoke and Flange Assembly: A simple yoke, screw and flange nut. ¼ NPT female connection. 3,200 psi rated. Order #45090OX for O_x/Nitrox Version



TANK FILLING ATTACHMENT REPLACEMENT PARTS

45052 Standard Bleeder Block Replacement: Includes standard bleeder block, bleeder screw and yoke retainer nut.

45028 Right Angle Bleeder Block Replacement: Includes right angle bleeder block, bleeder screw and yoke retainer nut.

45057 Ported Standard Bleeder Block Replacement:Includes ported standard bleeder block, bleeder screw

and yoke retainer nut.

45051 Bleeder Screw Replacement: Includes bleeder screw with nylon seat. For use on standard bleeder blocks.

45181 Bleeder Block DIN Fitting Replacement: Includes DIN fitting and stand ready to turn onto the fine thread used on Global standard bleeder blocks. Order #45181OX - for O₂/Nitrox Version

45091 Flange Nut and Retainer Clip Replacement: Fits the Standard Global yoke. Has 1/4 NPT female thread. Requires a snap ring pliers for installation.

45093 Yoke Assembly Replacement: Includes yoke body and yoke screw.





















TANK FILLING ADAPTERS

45188 DIN to Scuba Adapter: A female 300 BAR DIN fitting coupled to a yoke allows conversion of a DIN whip for yoke service. 3,200 psi service. Order #45188OX - for O₂/Nitrox Version

45020 Converter blocks: Simulates a standard yoke style valve connection and a $\frac{1}{4}$ NPT female port. Order #45020OX - for O₂/Nitrox Version

45206 Scuba to DIN Fill Adapter: Converts a yoke style whip to a male DIN fitting. 3,200 psi service. Order #45206OX - for O_2 /Nitrox Version

45184 DIN to Male Pipe Adapter, Brass: Comprised of a male 300 Bar DIN fitting and a $\frac{1}{2}$ male NPT pipe thread. 4,500 psi service, chrome plated brass. Order #45184OX - for $O_2/$ Nitrox Version

45193 DIN to Male Pipe Adapter, SS: Comprised of a male 300 Bar DIN fitting and a $\frac{1}{4}$ male NPT pipe thread. 4,500 psi service, stainless steel. Order #45193OX - for O₂/Nitrox Version

45186 Female DIN to Female Pipe Adapter, Brass:

Provides a female 300 Bar DIN connection to a $\frac{1}{4}$ female NPT pipe thread. 4,500 psi service, chrome plated brass. Order $\frac{1}{4}$ 45186OX - for O₂/Nitrox Version

45194 Female DIN to Female Pipe Adapter, SS: Provides a female 300 Bar DIN connection to a $\frac{1}{4}$ female NPT pipe thread. 4,500 psi service, stainless steel. Order #45194OX - for O_2 / Nitrox Version

45000 Scuba to SCBA Adapter: Converts a yoke filler whip to fill SCBA (fire / medical) tanks with a hand tight wheel. Fits CGA 346 / 347. 3,000 psi service. Order #45001 for replacement tip.

45010 SCBA to Scuba Adapter: Converts a SCBA filler whip to fill yoke style Scuba tanks. Includes integral bleeder. 3,000 psi service.

45187 DIN to SCBA Adapter: Convert a DIN filling whip to allow filling of CGA 346 / 347 / SCBA tanks. 4,500 psi service.



TANK FILLING

EQUALIZERS

Sometimes called a cross over. These devices use a 2 foot long 5,000 psi working hose. All models have an integral bleeder. Air use only, see page 33 for $\rm O_2/Nitrox\ Versions$

56150 Standard Yoke

Equalizer: Connects two yoke style tanks. 3,200 psi service. Order #56150OX - for O₂/Nitrox Version

56151 Deluxe Yoke Equalizer: Adds a 5,000 psi gauge to the 56150. Order #56151OX - for O₂/Nitrox Version

56140 Standard DIN Equalizer:

Connects two 300 Bar DIN style tanks. 4,500 psi service. Order #56140OX - for O₂/Nitrox Version

56145 Deluxe DIN Equalizer:

Adds a 5,000 psi gauge to the 56140. Order #56145OX - for O₂/Nitrox Version

56160 Air Inflator: Consists of an air chuck on a hose equipped with a scuba yoke. Used to inflate tires or inner tubes from dive tanks. Designed for medium pressures, air flow must be controlled by cautiously opening the tank valve.

TANK CHECKERS

Check tank pressures quickly and easily. All models have an integral bleeder. Air use only, see page 33 for O₂/Nitrox Versions

57234 Super Economy Yoke Tank Checker: An aluminum yoke and 2" gauge make up this low cost pressure checker for yoke tanks.

57230 Standard Yoke Tank Checker: Includes economy 5,000 psi gauge with vinyl

cover. 3,200 psi service. Order #57230OX - for O₂/Nitrox Version

57231 Deluxe Yoke Tank

Checker: Includes Stainless Steel, sealed 5,000 psi gauge. 3,200 psi service. Order #57231OX - for O₂/Nitrox Version

57235 Standard DIN Tank

Checker: For use one 300 Bar DIN tanks. Includes economy 5,000 psi gauge. 4,500 psi service. Order #57235OX - for O₃/Nitrox Version

57232 Deluxe DIN Tank

Checker: For use one 300 Bar DIN tanks. Includes Stainless Steel, sealed 5,000 psi gauge. 4,500 psi service. Order #57232OX - for O₂/Nitrox Version

57220 Converto Tank Checker:

Adds the #45188 DIN/Yoke Converter to the #57232 Deluxe DIN Tank Checker giving the ability to check yokes up to 3,200 psi. Order #57220OX - for O,/Nitrox Version

57236 SCBA Tank Checker:

Check the pressure in CGA 346/347/SCBA tanks with this Stainless Steel Checker.













57232



57220





COMPRESSED GAS HARDWARE

OXY-CLEAN

STORAGE CYLINDER VALVES

Global stocks industrial valves for common Scuba applications. Valves are made by Sherwood and are the GV series. Standard threads are ¾ NGT, unless otherwise noted. See price list for burst disc replacement assemblies and older style TV rebuild kits.

46140 Standard CGA 346 air valve: 3,000 psi service. Order #46136 for rebuild kit.

46145 High Pressure CGA 347 air valve: 4,700 psi service, Order

#46135VS-GV347 for rebuild kit.

46148 High Pressure CGA 347 air valve: 4,700 psi service with special Oversize ¾ NGT threads, Order # 46135VS-GV347 for rebuild kit

46149 High Pressure CGA 702 air valve: 6,000
psi service, order #10139
for rebuild kit

46130OX Standard CGA 540 oxygen valve:3,000 psi service. Order #46136OX for rebuild kit.



STORAGE CYLINDER INTERCONNECTS

With a combination of tees, elbows and interconnect hoses, any number of storage cylinders can be interconnected via JIC fittings.

45074 CGA 346 Elbow: 3,000 psi service

45073 CGA 347 Elbow: 4,500 psi service

45079 CGA 346 Tee: 3,000 psi service

45077 CGA 347 Tee: 4,500 psi service

45078 Pigtail Interconnect hose: 24" long, 5,000 psi air service. Female JIC swivel ends.

450710X CGA 540 Elbow for Oxygen: 3,000 psi service, SS JIC Fitting

45072OX CGA 540 Tee for Oxygen: 3,000 psi

service, SS JIC Fitting

45076OX Pigtail Interconnect hose: 18" long, 4,500 psi service for oxygen. Teflon lined, SS Braided Hose





CGA WRENCH-TIGHT NUTS AND NIPPLES

Global offers all wrench-tight nipples with integral particle filters. Sold in matched pairs of nut/nipples. All connectors are brass.

45200 CGA 346: 3,000 psi air service

45135 CGA 347: 5,500 psi air service

452110X CGA 540: 3,000 psi oxygen service

45270OX CGA 580: 3,000 psi inert gas service

45275OX CGA 590: 3,000 psi mixed gas service

45525OX British Bullnose: 3,000 psi oxygen service

45136 CGA 702: 7,500 psi air service

CGA HAND TIGHT NUTS AND NIPPLES

All Global hand tight nuts allow for connection and removal without tools because they utilize soft plastic seals. All connectors are brass unless otherwise noted.

45005 CGA 346: 3,000 psi air service. Order #45001 for replacement seal.

45019 CGA 347: 4,500 psi air service, Stainless Steel construction. Order #45016 for replacement seal.

451100X CGA 540: 3,000 psi oxygen service: Order 451110X for replacement seal.

45212OX CGA 540 Medical: 3,000 psi oxygen service. Order

49011OX for replacement seal.

45265OX CGA 580: 3,000 psi inert gas service. Order 49111OX for replacement seal.

45023 SCBA Fill Adapter,

Aluminum: Attach to the end of a fill whip with the 1/4 NPT male connection. Fits both CGA 346 and CGA 347. Has an internal 0.040" orifice to limit flow for safety. Rated for 6,000 psi. Order 49010-90 for replacement seal.

45024 SCBA Fill Adapter LP Safety, Aluminum: Attach to the end of a fill whip with the 1/4
NPT male connection. Fits both CGA 346 and CGA 347, but will bleed out for CGA 346. This unit prevents inadvertent high pressure filling of a low pressure SCBA tank. Has an internal 0.040" orifice to limit flow for safety. Rated for 6,000 psi. Order 45024RK for rebuild kit.













CGA NPT ADAPTERS

Having the same gender as their corresponding CGA valves, these adapters are commonly used to adapt CGA fill whips to pipe threads. CGA 346, 347 and 540 all incorporate a male CGA connection where CGA 580 is female. All connectors are brass unless otherwise noted.

45009 CGA 346 to % NPT female: 3,000 air psi service **45011 CGA 346 to % NPT**

male: 3,000 psi air service 45014 CGA 347 to ¼ NPT







female: 5,500 psi air service

45238 CGA 347 to ¼ NPT female: 5,500 psi air service, Stainless Steel Construction

45239 CGA 347 to ¼ NPT male: 5,500 psi air service, Stainless Steel Construction

45013OX CGA 540 to 1/4 NPT female: 3,000 psi oxygen service.

45012OX CGA 540 to ¼ NPT male: 3,000 psi oxygen service.

45008 CGA 580 to 1/4 NPT female: 3,000 inert gas psi service

45007 CGA 580 to ¼ NPT male: 3,000 psi inert gas service









CGA CONVERSION ADAPTERS

453130X CGA 346 female to CGA 540 male: Allows a CGA 540 hose to connect to a CGA 346 cascade bottle valve.

45312OX CGA 540 male to CGA 580 male: Allows a CGA 540 hose to connect to a CGA 580 cascade bottle valve.





PRESSURE RELIEF VALVES

46320 Standard Relief Valve: Adjustable "pop-off" valve protecting filters, storage vessels etc. Designed for 6,000 psi service, it can be adjusted from 300 to 5,500 psi. ¼ NPT male connection. Order #46321 for



rebuild kit.

Slow, gentle activation mechanism quickly reduces pressure during frequent, repeated openings. Used as an "active" safety valve during compressing or tank filling operations. 7,000 psi service, ¼ NPT male connection

device that can arrest the air flow in lines or systems (such as scuba filling whips) if that apparatus should fail (hose rupture, O-ring failure. etc.). The flow is reduced to 10%, so personnel can shut down the system with minimal risk and air loss. 1/4" NPT female in, ¼ NPT male out. 6,000 psi service.







ON/OFF VALVES

46330 Line valve: Multi turn valve. 6,000 psi rated. ¼ NPT female in, ¼ NPT male out. Order #46332 for rebuild kit.

Order #46330OX for O₂/Nitrox Version

46331 Line valve, panel mount: Panel mount version of #46330. Clamps securely with jam nuts through a 1" panel hole. Order #46332 for rebuild kit. Order #46331OX for O₂/Nitrox Version





COMPRESSED GAS HARDWARE

BALL VALVES

46170 Stainless Steel Ball

Valve: One quarter turn to open or close. 5,000 psi service. ½ NPT female ports. Panel mount ready. Order #46172 for rebuild kit. Order #46171 for Parker rebuild kit.

46290 Three Way Stainless Steel Ball Valve: One input port and 2 outlet ports, selectable by turning the handle. 5,000 psi service. All ports ½ NPT female. Panel mount ready.



46170



CHECK VALVES

46205 M/F Stainless Steel Check Valve: ¼ NPT female in, ¼ NPT male out ports, 5,000 psi

 $\frac{1}{4}$ NPT male out ports, 5,000 psi service. Order #46205OX for $O_2/$ Nitrox Version

46210 Female Stainless Steel

Check Valve: ¼ NPT female ports in and out, 5,000 psi service. Order #46210OX for O₂/Nitrox Version

46220 Male Stainless Steel Check Valve: ¼ NPT male ports in and out, 5,000 psi service.
Order #46220OX for O₂/Nitrox Version

46215 Rebuild kit for all Stainless Steel Check Valves for air service: Order #46215OX for O₂/Nitrox Rebuild Kit

46225 Reversible Aluminum Check Valve: A special, reversible internal poppet allows the flow direction to be reversed in the field. 6,000 psi service, 1/4 NPT male and female ports.









REGULATORS

46105 Utility Gas Regulator:

A small, compact regulator suitable for use on air, helium, argon, or oxygen. 3,200 psi service, preset 80 psi out. 1/4" NPTF inlet port with two ¼ NPT female outlet ports and a 1/8" NPT female gauge port.

46115 Air Control Regulator: Adjustable air control from 100 to 5500 psi with high flows. Self-venting when pressure is reduced. 2-inlet and 2-outlet ports, all 1/4 NPT female. 6,000 psi max inlet pressure in an all aluminum body. Order #46117





for rebuild kit. Order #45395OX for special brass O₂/Nitrox version. Order 46115KPJ for replacement knob

46116 Panel Mounting Ring:

Heavy aluminum ring with 4 setscrews to panel mount #46115 and #45395OX regulators through a 1-7/8" panel hole.

46120 In-Line Air Supply Regulator: Aluminum regulator for 6,000 psi air service with adjustable 100 – 300 psi outlet pressure.1/4" NPT female ports. Safety relief valve activates if outlet pressure exceeds 300 psi.





OXY-CLEAN

BLEEDERS

Global offers a wide variety of bleeders. Stainless Steel versions are 5,000 psi rated and all use the #46235 for seat replacement.

46230 Stainless Steel Female Bleeder: ¼ NPT female ports. Order #46230OX for O₂/ Nitrox Version

46231 Stainless Steel Male/Female Bleeder: ¼ NPT male and female ports.
Order #46231OX for O₂/Nitrox Version

46232 Stainless Steel Male Bleeder: ¼ NPT male ports. Order #46232OX for O₂/Nitrox Version

46233 Stainless Steel Drain Vent: Allows venting of a single port. ¼ NPT male port. Order #46233OX for O₂/Nitrox Version

46285 Petcock Drain: Adds a barbed fitting to the drain port of the 46233 allowing the vented gas to be tubed and directed. Commonly used for moisture or liquid drains.

45080 Brass Drain Vent: 2,500 psi service. ¼ NPT male threads. Non-replaceable seat.

46335 In Line Ported Bleeder: A chrome plated brass bleeder block with a $\frac{1}{4}$ NPT female gauge port. $\frac{1}{4}$ NPT male and female ports. 4,500 psi service. Order #46335OX for O_2 /Nitrox Version









MANIFOLDS

45386 10 Port Brass Manifold:

A heavy-duty, chrome plated brass manifold with 10 ¼ NPT female ports. Two ¼-20 tapped holes on the rear allow for panel mounting or use of the #45217 optional mounting bracket.

Order #45386OX for O₂/Nitrox Version

45387 6 Port Brass Manifold:

A shorter version of the 45386 containing 6 ¼ NPT female ports. Uses the same #45217 mounting bracket. Order #45387OX for O₂/Nitrox Version

45217 Mounting Bracket: A stainless steel mounting bracket which orients the manifold at a 30 degree angle from vertical. Four clearance holes allow fixing to a wall or panel with bolts up to 5/16".

45380 Flat Manifold Block 5

port: This anodized aluminum block (1" x 4" x 2") has five ¼ NPT female ports: 1 on each end, 1 on top, and 2 on the bottom. Four through holes for mounting. 5,000 psi service. NOT SUITABLE FOR OXYGEN SERVICE

45381 Flat Manifold Block 7 port A longer (12") version of our popular 5-port: Anodized aluminum manifold block (#45380), but with seven female ¼ NPT ports. Four through holes for mounting. NOT SUITABLE FOR OXYGEN SERVICE

45501OX Small, 2.0" hexagonal brass block with

7-ports: one dead center and one on each face of the hex. All ports 1/4 NPT female. 3,000 psi service.



COMPRESSED GAS HARDWARE

GAUGES

46000 5,000 PSI Panel Mount

Gauge: 2.5" stainless steel case, ¼ NPT male center back mount connection, U bracket mounting. Order #46005 for 300 psi.

46055 5,000 PSI Sealed Gauge:

2.5" stainless steel case, ¼ NPT male stem mount connection.

Order:

46020 for 300 psi.

46085 for 6,000 psi

46086 for 7,500 psi

46087 for 350 Bar

46065 5,000 PSI Sealed Gauge:

2.5" stainless steel case, oil filled, $\frac{1}{4}$ NPT male stem mount connection.

46060 5,000 PSI Economy Gauge: 2.5" plastic case, ¼ NPT male stem

2.5" plastic case, ¼ NPT male stem mount connection. Order #46015 for 300 psi

46008 5,000 PSI Economy Gauge:

2.0" plastic case, 1/8 NPT male center back mount connection.

46009 5,000 PSI Economy Gauge:

2.0" plastic case, 1/8 NPT male stem mount connection.

46040 5,000 PSI Sealed Gauge:

4.0" stainless steel case, ¼ NPT male stem mount connection.

46030 Large Panel Gauge, 5,000

psi: A 4.5" dial unit (6.25" overall diameter) with a lift off front cover. For recessed panel mounting with mounting screws hidden by the front cover for a clean look. Used for regulator / valve workstations or air station applications. For 300 psi version, order 46010.

48321 Salt Water Instrument Test

Gauge, 450 feet: This 4.5" dial gauge is the same gauge used on the 48320 Extended Range Instrument Test Chamber. In a green housing, this gauge reads in both feet (450 feet) and meters of sea water (140 meters). Comes with NIST traceable calibration test data verifying its accuracy.

48315 Salt Water Instrument Test

Gauge, 450 feet: This 4.5"dial gauge is the same gauge used on the 48320 Extended Range Instrument Test Chamber. In a yellow housing, this gauge reads in both feet (300 feet) and meters of sea water (90 meters). Comes with NIST traceable calibration test data verifying its accuracy.















46008





48321

46030

HIGH PRESSURE FILL HOSE

Global offers high pressure fill hoses in two sizes, 3/16": ID and ¼" ID. The ¼" size is especially suited for breathing air. This hose was developed by Global to meet NFPA and CGI standards. A special selection of materials was chosen to maximize strength and weight while still meeting the 4:1 burst to working pressure rating required by NFPA 1901. Hydrocarbon emissions were also kept in mind when considering the standard of CGI Grade E air specifications. For example, in using a 5 foot, fill whip with the new Global fill hose, the hydrocarbons introduced into the airstream by the hose are nearly undetectable.

Standard fittings for ¼" ID hose are ¼ NPT male and #4 Female JIC Swivel.

Standard fittings for 3/16" ID hose are 1/8 NPT male, ¼ NPT male and #4 Female JIC Swivel.

Steel fittings are standard while Stainless Steel are available for added corrosion resistance.

Custom lengths available up to 500 feet in one single hose. See price list for hose ordering instructions.





1/4" HP Hose end fittings



3/16" HP Hose end fittings

COMPRESSED GAS HARDWARE

HIGH PRESSURE FITTINGS

Global offers a wide selection of high pressure fittings for modern air and mixed-gas stations. Most fittings are available in plated carbon steel, stainless steel and brass. Service Pressures: 5.000 psi for steel / stainless. 3,000 psi for brass. All Global brass fittings are rated for 3,000 psi service! For oxygen / Nitrox service, use brass or stainless, but NEVER

carbon steel (rusts). Each fitting type has the same unique part number with a suffix denoting the material type (B) Brass, (S) Steel and (SS) Stainless Steel.

All Brass and Stainless Steel fittings can be ordered Oxygen Cleaned. Just add a "-OX"

to the end of the part #. For Example, 67270B-OX, is an oxygen clean, female cross. All NPT fittings are 1/4 NPT unless otherwise noted. All JIC fittings are size 4, unless otherwise noted.





67220B 67220S 67220SS









67210B 67210S 67210SS

















JIC Male Union













JICM to MNPT Straight 67170S 67170SS



JICM to FNPT Straight 67190S 67190SS 67200S 67200SS

Tube Union







67040S 67040SS





67060S 67060SS



Tube to 1/4 MNPT Elbow 67350S 67350SS

Tube to 1/4 FNPT Elbow 67360S 67360SS

Tube to 1/4 Branch Street Tee 67070S 67070SS



67030S 67030SS

PAINTBALL TRANSFILLERS

Paintball transfillers are designed to allow the filling of Paintball bottles from a variety of sources including scuba tanks, cascade bottles, fill whips etc.. All Deluxe models come with a 5,000 psi pressure gauge and a metering orifice for slow filling. All extension hoses are 3/16" ID and rated for 6,000 psi working, 20,000 psi burst. Add '-6', '-18' or '-36' to the transfiller part number for 6", 18" or 36" long extension hoses. Contact Global for custom length extension hoses.

56192 Paintball Transfiller, economy yoke: An aluminum yoke, bleeder screw and Paintball QD, 3,200 psi rated. Order 56192-6, 56192-18 or 56192-36 for transfiller with respective extension hose.

56193 Paintball Transfiller, economy yoke with gauge: An aluminum yoke, bleeder screw and Paintball QD with a 2" 5,000 psi gauge. 3,200 psi rated. Order 56193-6, 56193-18 or 56193-36 for transfiller with respective extension hose.

56167 Paintball Transfiller, standard yoke: Made with Global's standard brass yoke / bleeder assembly and Paintball QD, 3,200 psi rated. Order 56167-6, 56167-18 or 56167-36 for transfiller with respective extension hose.

56168 Paintball Transfiller, standard DIN connection:

Attaches to a standard 300 bar DIN tank valve, includes bleeder and Paintball QD, 4,500 psi rated. Order 56168-6, 56168-18 or 56168-36 for transfiller with respective extension hose.

56178 Paintball Transfiller, CGA 347 connection: Attaches to a CGA 347 (SCBA) 300 bar tank, includes bleeder and Paintball QD, 4,500 psi rated.

Will also attach to a CGA 346 connection. Order 56178-6, 56178-18 or 56178-36 for transfiller with respective extension hose.

56181 Paintball Transfiller, CO₂ connection: Attaches to CGA 320 (CO₂) bottle, includes bleeder and Paintball QD, 3,000 psi rated. Order 56181-6, 56181-18 or 56181-36 for transfiller with respective extension hose.

56170 Deluxe Paintball Transfiller, yoke: Made with Global's standard brass yoke / bleeder assembly and Paintball QD. Includes a 5,000 psi gauge and metering orifice for slow filling. 3,200 psi rated. Order 56170-6, 56170-18 or 56170-36 for transfiller with respective extension hose 56170-6 shown.

56171 Deluxe Paintball Transfiller, standard DIN connection: Attaches to a standard 300 bar DIN tank valve, includes bleeder and Paintball QD. Also includes a 5,000 psi gauge and metering orifice for slow filling. 4,500 psi rated. Order 56171-6, 56171-18 or 56171-36 for transfiller with respective extension hose.

56180 Deluxe Paintball
Transfiller, CGA 347
connection: Attaches to a
CGA 347 (SCBA) 300 bar
tank, includes bleeder and
Paintball QD, 4,500 psi rated.
Will also attach to a CGA 346
connection also. Includes a
5,000 psi gauge and metering
orifice for slow filling. Order
56180-6, 56180-18 or 56180-36
for transfiller with respective
extension hose.

56182 Deluxe Paintball Transfiller, CO₂ connection:

Attaches to CGA 320 (CO₂) bottle, includes bleeder and Paintball QD. Includes a 5,000 psi gauge and metering orifice for slow filling. 3,000 psi rated. Order 56182-6, 56182-18 or 56182-36 for transfiller with respective extension hose.















56171



PAINTBALL





56184 Deluxe Paintball Transfiller, Modular Connection:

A flexible and configurable transfiller. Choose the desired source connection: Scuba Yoke, DIN, CGA 346/347 or $\rm CO_2$. Each has interfaces via QD for quick changes. Comes with 5,000 psi gauge and metering orifice for slow filling. Order 56184 along with corresponding adapters listed below.

56184-YK: Scuba yoke connection with QD stud.

56184-DN: Scuba DIN connection with QD stud.

56184-347: CGA 346/347 connection with QD stud

56184-CO: CGA 320 (CO₂) connection with QD stud

56184-CP CO2 Pin Valve connection with QD stud

Extension hoses also available, add '-6', '-18' or '-36' to base 56184 part number for respective extension hose 56184-6 shown, adapters sold separately.

56185 Paintball Fill Station: Housed in an aluminum chassis, this handsome unit allows for quick and easy filling of Paintball cylinders. Has a handy, manually actuated fill valve, pressure gauge and Paintball QD at the end of a 36" fill hose.

PAINTBALL ADAPTERS

56165 Paintball Fill Adapter,

Yoke: Mates to any scuba tank filler whip (yoke mode) and allows recharging of small paintball tanks. 3,200 psi service. Order 56165ME for version with metering element for slow filling.

56166 Paintball Fill Adapter,

DIN: Mates to any scuba tank filler whip (300 Bar DIN) and allows recharging of small paintball tanks. 4,500 psi service. Order 56166ME for version with metering element for slow filling.

56175 Paintball Coupler, Stainless Steel, 1/8 NPT male: 5,000 psi rated.

56176 Paintball Coupler, Stainless Steel, 1/8 NPT female: 5,000 psi rated.

56191 Quick fill valve: A handy toggle valve for quick fills of small paintball tanks. Simply pull the handle to open the valve with a spring return to close. 1/4 male NPT input connection with a female 1/4 NPT output connection. 6,000 psi service.

56194 CO2 Pin Valve Adapter:

It is becoming more common to see CO2 Pin style valves used on Paintball and similar tanks. This adapter has a ¼ NPT female connection on one end and a female CO2 pin type on the other. Since most of these tanks are relatively small in volume, it is easy to over heat them by rapid filling .This fitting has a small, integral metering orifice to slow filling. 3,000 psi rated.











MIXED GAS / NITROX / OXYGEN

OXY-CLEAN

SPECIALTY GAS ADAPTERS

Many of our standard products can be cleaned for oxygen use. Look for the "OX" at the end of the part number throughout the catalog.

45020OX Scuba Port Converter, Oxygen-Clean: A

rectangular, chrome-plated brass block with an O-ring sealed regulator port, identical to that on a scuba tank valve. Gas inlet port in the bottom of the block is ported female 1/4" NPT. Used for special adaptions and TEK rigs. 3,200 psi service. Delivered oxy-clean.

45035OX Medical Oxygen Port Converter: Attach a CGA 870 Oxygen yoke and convert to 1/4 NPT female.

45225OX Oxygen CGA

Adapter: Attached to a CGA 540 cascade bottle and provides connection with a CGA 870 oxygen yoke.

45230OX Oxygen to Scuba Regulator Adapter: Today oxygen breathing is used for topside emergency situations as well as for in-water shallow decompression during certain advanced diving. This adapter fits CGA 540 oxygen valves and provides an O-ring flange port for the attachment of an oxyclean scuba regulator.

45236OX Oxygen Yoke: A CGA 870 medical oxygen, 2-pin yoke with a 1/4" NPTM inlet. For adaptations involving medical oxygen tanks and other specialty equipment. For replacement washer: Order #45237OX.

45235OX Medical Oxygen to Scuba Regulator Adapter:

Similar to #45230OX, except it adapts a tank with 2-pin medical O₂ valve (CGA 870) for use with an oxygen dive regulator. Also serves as a filling adapter when charging small medical bottles with Global transfillers from blending stations or commercial cylinders.

Nitrox / Oxygen Manifold

Blocks: Creating diving mixtures from raw gases often requires a mixing vessel, or plenum, which can be the tank itself augmented with a manifold to interconnect various system components. Oxy-clean versions of our air manifolds work well for this purpose. Global offers a long block and a compact style with multiple 1/4" NPTF ports and associated mounting brackets. See page 25.

See Page 24 for Oxygen Clean Check Valves.

Breathing Gas Quick-Couplers:

Quick disconnects are very popular for rapid switching of supply hoses during gas mixing operations and for various TEK diving applications. Global offers a special, hi-pressure brass coupler capable of 5,000 psi service. Straight-through (no check valve) configuration with 1/4" NPT ports. Suitable for mixed gas applications, including pure oxygen. Couplers have only one simple Viton, O-ring seal (Replacement: Order #49110OX). For added corrosion and resistance, couplers can be order in stainless steel. Just add "SS" to the end of the part number. For example, a stainless steel quick coupler, male NPT would be a 45510OX-SS (pictured). All couplers and mating studs are delivered oxyclean.

45510OX Quick Coupler,

Male NPT: Coupler unit only, order 45510OX-SS for stainless version.

45515OX Quick Coupler,

Female NPT: Coupler unit only, order 45515OX-SS for stainless version.

45516OX Coupler Mating

Stud, Male NPT: Brass stud only, order 45516OX-SS for stainless version.

45517OX Coupler Mating Stud, Female NPT Port: Brass stud only, order 45517OX-SS for stainless version.

See Page 25 for Oxygen Clean Bleeders.















45510OX-SS



45516OX



OXY-CLEAN

METERING VALVES AND ORIFICES

453100X Metering Orifice

Only: A heavy brass body with an internal pinhole orifice which can govern gas flow rates. Can flow in either direction. 1/4 NPT male and female connection.

45475OX Flow Controller: O. line valve with metering orifice. This combination makes for a handy, yet durable metering device. 1/4" NPT female inlet, male outlet; 5,000 psi service. Order #45476OX for panel mount version thru 1 inch hole.

45395OX High Pressure Blending Regulator: This special regulator can control intermediate and final "end pressures" during gas mixing operations. Simply dial in the desired set pressure on the regulator and the gas input to your mixing system will be arrested automatically at that point. Unit will self-vent whenever pressure is reduced with the control knob. Can be used with oxygen, OCA air, or helium. Four 1/4" NPT female ports: 2-inlet, 2-outlet, one each for a main line and a gauge. Pressure ratings: 6,000 psi in -4,000 psi out. Delivered oxyclean. Can be panel-mounted. NOTE: Regulators control pressure, but NOT flow. Control valves or metering orifices must still be used for that purpose. Panel Mounting Ring: Order #46116.

45315OX Brass Metering

Valve: An oxygen clean needle valve used for precision gas mixing. ¼ NPT male ports, 3,000 psi service.

45370OX Stainless Steel Metering Valve: An oxygen clean needle valve used for precision gas mixing. ¼ NPT male ports, 5,000 psi service.

Both the 45315OX and 45370OX metering valves ship standard with black knob caps. Other colors are available to aid in gas identification.

45315OX-GRN Green knob cap for Oxygen

45315OX-YEL Yellow knob cap for Oxygen Compatible Air

45315OX-BRN Brown knob cap for Argon

















454500X... Nitrox STIK Mixing System -10 - 30 cfm

454510X... Nitrox STIK Mixing System -3.5 - 10 cfm

Nitrox STIK Continuous Blender Perhaps the ideal method of preparing Nitrox would be to blend it through one's own, existing compressor system and pump it directly into dive or storage tanks. To date, that could be done only with oil-free compressors because injector/mixer systems for air and pure oxygen often yielded incomplete blending, possibly allowing gas pulses with very high O₂ concentration to enter the machine. In an oil-free compressor, that presents no problem; in a regular machine, it could explode!

Now, based upon longtime blending technology used in scientific laboratories, comes a simple apparatus that so thoroughly homogenizes the input gases that they can be piped directly into normal compressors and pressurized. Nitrox, with up to 40% oxygen content, can be economically prepared with little danger of any mishap. (Nitrox with over 40% O₂ is NOT safely achievable with this system). The device is adaptable for production of various Nitrox mixtures, compressor flow ratings, and other physical variables.

The mixing assembly consists of a tubular Blending Unit which homogenizes incoming air with pure oxygen that is fed into the Stik by a medical O₂ regulator (CGA 540). A preset metering valve on the regulator governs the gas flow and prevents excessive O₂ input. An oxygen sensor port is located near the blender's outlet where an analyzer (not included) can be attached to monitor the O₂ content of the Nitrox being delivered into the compressor. The compact unit is mounted on a varnished, wooden plaque measuring 26" L x 5.5" W x 7.5" D.

As it turns out, the STIK works well in conjunction with partial pressure mixing apparatus. The STIK can easily produce large volumes of Nitrox up to 40% oxygen content which is then banked in storage cylinders. When Nitrox of lesser O₂ content is needed, the bank mixed is simply diluted with air at a dedicated mixing manifold station. This same banked Nitrox can be used to prepare Trimix in many cases. Thus the Stik and Manifold prove to be a very versatile combination.

MIXED GAS / NITROX / OXYGEN

OXY-CLEAN

TRANSFILLERS

These devices are used to transfer either Oxygen or Inert Gas from large commercial cylinder into smaller bottles or scuba tanks. All transfillers have a 4 foot, Teflon core hose rated for 3,000 psi. Models for use with Oxygen contain a metering orifice to reduce flow. All CGA connecters are made using handtight connectors. Deluxe models include a 4,000 psi gauge.

452400X Oxygen CGA 540 to Scuba yoke

45245OX Oxygen CGA 540 to Scuba yoke, Deluxe with gauge

45242OX Oxygen CGA 540 to Scuba DIN

45248OX Oxygen CGA 540 to Scuba DIN, Deluxe with gauge

45325OX Oxygen CGA 540 to Oxygen CGA 870 yoke, Deluxe with Gauge

452600X Inert Gas CGA 580 to Scuba yoke

452610X Inert Gas CGA 580 to Scuba yoke, Deluxe with gauge

452630X Inert Gas CGA 580 to Scuba DIN

452640X Inert Gas CGA 580 to Scuba DIN, Deluxe with gauge











45325OX







OXYGEN HOSES

Standard Oxygen Pressure

Hose: Teflon-core hoses with stainless steel braid reinforcement and brass end fittings should be utilized for such gases. Our hoses have a 3,000 psi working pressure with a 12,000 psi burst. End fittings are male 1/4" NPT.

49285OX 3 feet 49286OX 4 feet 49287OX 5 feet 49288OX 6 feet

49284OX 2 feet

492890X 8 feet



49284OX-49289OX

45266OX Deluxe Modular **Transfiller Connection:** A

flexible, configurable transfiller for Oxygen or Inert Gas. Comes with a 4 foot hose, gauge, bleeder and metering orifice. Choose from Oxygen (CGA 540 or 870) or Inert Gas (CGA 580) input to Scuba Yoke, Scuba DIN or another Oxygen or Inert Connection on the output. Order 45266OX with corresponding adapters (sold separately) below:

455570X Inert Gas (CGA 580) with QD stud

455600X Oxygen (CGA 540) with QD stud

45267OX Oxygen (CGA 870) with QD stud

45268OX Scuba DIN with QD stud

45269OX Scuba Yoke with QD stud

Oxygen High Pressure Hose:

With a thicker Teflon-core and an extra stainless steel overbraid, Global highpressure oxygen / mixed gas hose is rated for 5,000 psi service. Stainless Steel Female #4 JIC fittings.

For extreme environments and high durability, choose the jacketed braid. The 5 foot high pressure hose comes with same Teflon core but add a plastic jacket to project the stainless steel overbraid. Stocked in 5 foot length only.

494600X 5 feet

494610X 18 inches

49462OX 5 feet with jacket



Use these handy conversion fittings for your Oxygen hoses. Shipped Oxygen clean.





67085SS-OX

Hoses

67085SS-OX Adapter FJIC to NPTF Convert the male NPT hose end to a female #4 JIC swivel: Stainless Steel. For use on Standard Oxygen

67170SS-OX JIC to NPTM adapter Convert the #4 JIC female to a 1/4 male NPT: For use on High Pressure Oxygen Hoses.



OXY-CLEAN

NITROX/ O, EQUALIZERS

Sometimes called a cross over. These devices use a 2 foot long 3,000 psi working hose. All models have an integral bleeder. See page 21 for Air use only versions.

561500X Nitrox / O₂ Yoke Mode Equalizer: Use with 2 yoke style scuba tanks.

56151OX Deluxe Nitrox / O₂ Yoke Mode Equalizer: Identical to #56150OX, except that the bleeder block has a 4,000 psi oxy-clean gauge to monitor pressure transfer.

561400X Nitrox / O₂ DIN Equalizer: Use with 2 DIN style scuba tanks.

56145OX Deluxe Nitrox / O_2 Equalizer: Identical to #56140OX, except that the bleeder block contains a 4,000 psi oxy-clean gauge to monitor pressure transfer.

453500X Mixed Gas Filler Whip: A 5-foot, Teflon-core hose (stainless steel over-braid) for 4,500 psi service, attached to a line valve (oxygen version) and chromed-brass bleeder block with a DIN fitting. Included is a 451880X Converter which quickly switches the DIN mode to yoke. Rated for 3,200 psi service in yoke mode; 4,500 psi with DIN. Free end with SS JIC to male 1/4 NPT adapter included.

57225OX Converto Tank Checker: O_2 Model - Convertible tester checks tanks with either DIN or yoke mode valves. Delivered oxyclean with a 4,000 psi gauge. Only "OX part numbers" are oxygencompatible.



NITROX/ O₂ GAUGES

45305OX Dwyer Digital Mixing Gauge: A new entry to the gas mixing genre: This O-ring sealed gauge with a rugged anodized aluminum case features 0.25% accuracy, selectable pressure scale (5,000 PSI or 350 BARS), automatic zeroing, and 2,000 operating hours on two AAA batteries! 1/4" male NPT bottom stem mount. Global sells a custom-production model that eliminates certain troublesome functions such as unstable zeroing, 2-minute auto shutoff and peak value memory, all of which interfere with conventional blending operations.

45316OX Ext. Battery Pack for Mixing Gauge:

Digital pressure gauges for partial pressure blending are highly accurate and quite expensive. Most types are battery powered. During the offseason, if batteries are not removed, they can rupture and leak acid into the gauge thereby destroying it. This can be a very expensive lesson. Global's digital mixing gauge 45305OX can now be purchased with an external battery pack option (2 AAA batteries). Gauge in picture not included.

45317OX Digital Mixing Gauge External Power Supply: For more permanent installations add the wall plug power supply.

45306OX Standard Sealed Process Gauge, 5,000 psi: A
2.5" dial gauge with a sealed, stainless steel case and a 1/4"
NPTM bottom stem mount.
2% accuracy. For general "clean gas" applications.

45307OX Large Sealed Process Gauge, 5,000 psi: A 4.0" dial gauge with a sealed, stainless steel case and a 1/4" NPTM bottom stem mount. 1% accuracy. For general "clean gas" applications.











MIXED GAS / NITROX / OXYGEN

of life.

OXY-CLEAN

OXYGEN ANALYSIS

All custom gas mixtures must be analyzed for oxygen content. This demands an accurate oxygen analyzer and a metering apparatus to deliver sampled gas to the instrument at proper flow rate and pressure.

48044OX MaxO₂+AE analyzer:

This handheld analyzer measures oxygen content from 0-100% using traditional galvanic sensor technology. The remote sensor is tethered to the analyzer with a 10" coiled cable. With a long life sensor, the analyzer and sensor both carry a 24 month warranty. Order #48045OX for replacement sensor.

48042OX MaxO,+A analyzer:

Similar to the 48044OX, except the sensor is built into the analyzer. Even though it is internal, the sensor can still be replaced. Measures Oxygen percentage from 0-100%. Both sensor and analyzer carry 24 month warranty. Order #48043OX for replacement sensor.

480410X Handi Scuba analyzer: A low cost oxygen
analyzer with built in sensor.
Measures from 0-99.9% oxygen
and carries a 24 month warranty.
Discard entire unit at sensor end

48052OX Analyzer Hook Up

Kit: Contains a six foot long piece of medical grade tubing, green Christmas tree connector and special barbed sensor adapter compatible will all of our analyzers.

48054BA Barbed sensor adapter: Connect tubing to the barb and slide over the two o-rings on your analyzer sensor.

48051OX Standard Mini-Ox

Sensor: Replacement sensor for Mini-Ox 1 units. 14 month warranty.

48055OX Large Mini-Ox Sensor: Replacement sensor

for Mini-Ox 1 units. 24 month warranty.

45520OX Wall-Mounted Adjustable Metering Device:

An automatic gas delivery device which mounts to any wall and will measure tank pressure while flowing gas mixtures from that tank to an analyzer. Flowmeter is easy to read from a distance and rates can be adjusted from 0.5 – 8.0 liters/minute. A 6-foot hose with yoke connection allows a group of tanks to be tested without clumsy handheld equipment. A line bleeder assures that a fresh gas sample is obtained from each tank. Works with any O₂ analyzer. 3,200 psi service. Order 45521OX for DIN version pictured.

45530DOX Basic Flow Selector Metering Device: A compact, regulator combined with a flow meter from 0.5 to 8.0 LPM to deliver gas directly from a yoke scuba tank to an oxygen analyzer at nearly atmospheric conditions. For DIN connection, order 45531DOX.

45532DOX Deluxe Selector Metering Device: A compact, regulator combined with a flow selector meter from 0.5 to 8.0 LPM to deliver gas directly from a yoke scuba tank to an oxygen analyzer at nearly atmospheric conditions. This unit also includes a 0-5,000 psi Nitrox/ O₂ clean gauge to verify tank pressure when analyzing. For DIN connection, order 45533DOX.

45537OX Micro-orifice flow restrictor, Yoke mode: Attach directly to a yoke scuba tank. This flow restrictor allows for a gentle flow suitable for an analyzer by slowly opening the tank valve. Flows approximately 11 liters per minute at 3,200 psi.

45538OX Micro-orifice flow restrictor, DIN mode: Attach directly to a DIN style scuba tank. This flow restrictor allows for a gentle flow suitable for an analyzer by slowly opening the tank valve. Flows approximately 15 liters per minute at 4,500 psi.













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OXY-CLEAN

MIXING DEVICES

Mixing Manifold: This blending bar system consists of a 10-port (1/4" NPT female), brass hexagonal bar and two inlet Flow Controllers with check valves. One for Oxygen and one for OCA. The 45305OX Digital Mixing Gauge is mounted up top. Also included is a #45350OX mixed gas filling whip (see page 33 for more details). Wall mounting is easy with the included #45217 mounting bracket.

45410OX Tri-Mix Gas Mixing Manifold: This blending bar system consists of a 10- port (1/4" NPT female), brass hexagonal bar and three inlet Flow Controllers with check valves. One for Oxygen, one for OCA and one for Inert gas. The 45305OX Digital Mixing Gauge is mounted up top. Also included is a #45350OX mixed gas filling whip (see page 33 for more details). Wall mounting is easy with the included #45217 mounting bracket.

45555OX Economy Blender:

This is a simplified device for the partial pressure blending of single tanks of Nitrox, Trimix, or decompression mixes. The product consists of a 300 bar,





DIN-mode gas-mixing whip (5-foot hose) with a stainless steel Metering Valve, a Digital Gauge (with 0.25% accuracy and a protective rubber cover), and a check valve to prevent resurgence of scuba tank gas. The supply end of the Blender is equipped with a quick coupler, so that the unit can be readily switched from one supply gas to another. A needle valve is also included on the supply end. This will allow for hook ups to 5,000 psi inlet pressure without worries of over-pressurizing the mixing hose. Included are Gas Supply Connectors for inputting both pure oxygen (CGA 540) #45560OX and Oxygen Compatible Air (OCA) #45561OX. This latter adapter allows the unit to be attached to any air station filler whip (yokemode) that can provide OCA. Various accessories are available to increase the versatility of the Blender:

45188OX Converts the DIN: mode filler to yoke mode

45557OX A helium Gas Supply Connector: for blending Trimix

45556OX An adapter to connect the Blender to a DIN: mode air station whip

45559OX A Gas Supply Pressure Quick Tester: to swiftly ascertain the available supply gas pressure prior to mixing.













MIXED GAS / NITROX / OXYGEN

OXY-CLEAN

HYPER-FILTRATION

With the widespread popularity of Nitrox diving, numerous dive shops are mixing air with pure oxygen to produce saleable "enriched air" mixtures. For safe blending, compressed air of purity greater than normal Grade E must be used. Known as "Oxygen Compatible Air" or OCA, this gas is permitted to have no more than 0.1 mg / m³ of hydrocarbon contaminants, whereas Grade E scuba air can contain 50 times that amount (5 mg / m³).

Hyper Filter Systems

These special hi-tensile aluminum towers will accept ONLY specific Hyper-Filter cartridges which actually "recirculate" the gas through high-purity chemicals that remove even trace level hydrocarbons. These superfiltration systems also control the pressure and flow rate at which the gas moves through the chemicals, thereby assuring complete removal of finite contaminants. Each Hyper-Filter System consists of the tower(s) with filter cartridge(s) plus a pressure-controlling priority regulator, flow governor, gauge and check valves, all mounted on an aluminum base plate.

44350 Double Tower Hyper-

Filter System: Consists of two tall towers (3.75 x 33"), two cartridges, and associated hardware mounted on a metal plate. A filter block with an inlet valve allows isolation of the system when not in use. Will accommodate air flow rates up to 12 cu ft. / minute and will process about 40,000 cu. ft. of OCA per cartridge set. Designed for permanent installation in a dive shop. 5,000 psi service.

44351 Hyper-Dry Cartridge for Tower #1 of above system

44352 Hyper-Clean Cartridge for Tower #2 of above system

44353 Hyper-Process Cartridge for single tower unit

44355 Single Tower Portable Hyper-Filter System:

Composed of a single tower (3.75 x 24"), filter cartridge, and associated hardware mounted on metal plate. Air enters the top of the filter and exits at the filter block / priority valve on the base plate. A carrying handle on the top of the tower allows this filter to be used "in the field" as well as in the dive shop (Weighs 25 lbs.). Accommodates air flow rates up to 6-8 cu. ft. / minute and will process up to 7,000 cu. ft. of OCA.





www.global-mfg.com

SALES INFORMATION

sales@global-mfg.com 512.240.6644 • 800.558.1811 • 512.240.6645 fax

MAILING ADDRESS

4674 Priem Lane, Suite 402 • Pflugerville, TX 78660

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