MADE IN THE USA

Aquasol®

WATER SOLUBLE PAPER AND TAPE

DISSOLVABLE PURGE GAS BARRIER FOR TIG WELDING

FEATURES

Low Air Permeable Purge Gas Barrier for Any Pipe Diameter

- Excellent Barrier For Retaining Noble Gas (Argon and Argon/Helium Mix)
- Wide Range of Sizes and Grades Permitting Construction of Any Pipe Diameter

Biodegradable, Safe & Easy Removal

- Made of Sodium Carboxy Methyl Cellulose & Wooden Pulp
- Effortlessly Dissolves During Water or Steam Hydro-test
- 100% Biodegradable Leaving No Residue In The Pipeline
- Safe for Nuclear, Petrochemical, Food, Beverage & More

Aquasol CORPORATION

aquasol**welding**.com

Aquasol®

WATER SOLUBLE PAPER AND TAPE

WHAT IS AQUASOL® WATER SOLUBLE PAPER?

Aquasol® Water Soluble Paper provides a convenient and cost effective method for creating purge chambers for pipe welding.

How Does It Work?

Aquasol® Water Soluble Paper is simply cut to shape, folded and taped to each side of the pipe. It creates a barrier for inert gases such as argon and helium. Once the weld is complete, the pipe is flushed with water or steam and the Aquasol® Water Soluble Paper dissolves instantaneously.

Does It Work in Any Water Temperature?

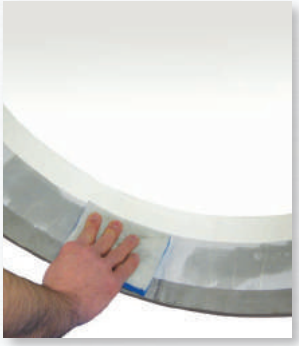
Yes, Aquasol® will dissolve in either hot or cold water. However, the rate of dissolvability increases as the temperature of the water increases.

How Do I Achieve a Perfect Seal?

Aquasol's Water Soluble Tape is engineered in such a way that it will allow the user to place the dam in the proper position before maximizing the adhesive seal. The strength of the "tack" or stickiness of the adhesive allows the user to have control and reposition the dam if not properly placed on the first attempt. Once the dam is positioned, the user can increase adhesion by reactivating the adhesive on the tape portion of the dam and form a tight seal as illustrated below:

Activate the Water Soluble Tape

Moisten an ordinary sponge in water. Squeeze out excess water.



Lightly dab sponge along the water soluble tape portion of the dam.

The dampened sponge will reactivate the adhesive to ensure zero air permeability.

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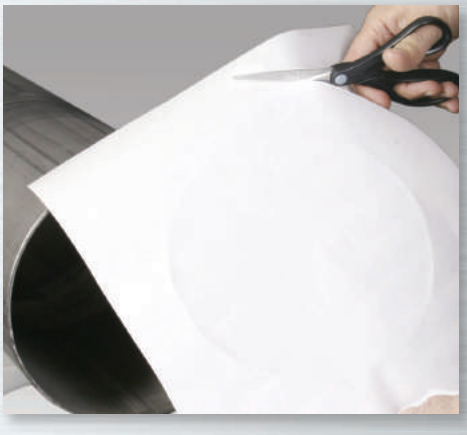
HOW TO CREATE AN AQUASOL® WATER SOLUBLE PURGE DAM

1 TRACE & IMPRESS

Trace pipe's inner diameter. Create an impression of the pipe. Fold to form 90˚ angle.



2 CUT

Cut the circle 1.3 times greater than pipe diameter.

3 SLIT

Slit approximately 1" to 2" segments perpendicular to impression on paper.

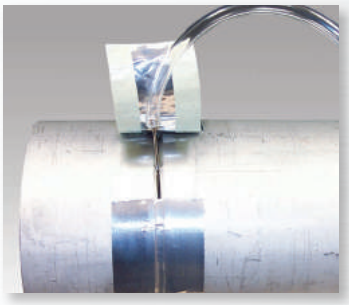
Make first slit at 12 o'clock position followed by 3 o'clock, 6 o'clock and so on.

4 POSITION PIPE & TAPE IN PLACE

Cut Aquasol® Water Soluble Tape into pieces and secure in place.

5 REPEAT

Repeat process on other side.



- Cover root gap with EZ Zone® Tape.
- Your set up is complete.
- Introduce argon via the root gap.

Aquasol CORPORATION

Recommended Proximity To Weld Joint

PIPE DIAMETER		RECOMMENDED DISTANCE	
ENGLISH	METRIC	ENGLISH	METRIC
2" - 8"	51 - 203 mm	6"	152 mm
10" - 22"	254 - 559 mm	8"	203 mm
24" - 36"	610 - 914 mm	12"	305 mm

SPECIFICATIONS

Aquasol® Purge Paper and Purge Tape: Types and Sizes

ITEM NO.	THICKNESS	DIMENSIONS		TYPE	CASE PACK
		ENGLISH	METRIC		
ASW-35/S-11RW	.0035"	8 ½" x 11"	22 cm x 28 cm	Sheet	500 sheets/ream
ASW-35/S-14R	.0035"	8 ½" x 14"	22 cm x 36 cm	Sheet	500 sheets/ream
ASW-35/S-22R	.0035"	17" x 22"	43 cm x 56 cm	Sheet	500 sheets/ream
ASW-60/S-22R	.0070"	15 ½" x 22"	39 cm x 56 cm	Sheet	250 sheets/ream
ASW-35/R-9	.0035"	9" x 165'	23 cm x 50 m	Roll	4 rolls/case
ASW-35/R-15	.0035"	15 ½" x 165'	39 cm x 50 m	Roll	4 rolls/case
ASW-40C/R20.5	.0050"	20 ½" x 165'	52 cm x 50 m	Roll	4 rolls/case
ASW-60/R-15	.0070"	15 ½" x 165'	39 cm x 50 m	Roll	4 rolls/case
ASW-60/R-31	.0070"	31" x 165'	79 cm x 50 m	Roll	4 rolls/case
ASWT-1	N/A	1" x 300'	2.5 cm x 92 m	Roll	24 rolls/case
ASWT-2	N/A	2" x 300'	5 cm x 92 m	Roll	12 rolls/case

Selecting The Proper Grade

ASW-35	Use for pipes having 4" inner diameter or less
ASW-40C	Use for greater gas retention
ASW-60	Use for pipes having 4" inner diameter or greater
ASWT	Use in addition to water soluble paper for pipes greater than 2" in diameter

For additional product information, quotations and ordering, please contact:

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EZ Purge®

PRE-FORMED, SELF-ADHESIVE WATER SOLUBLE PURGE DAMS

US & FOREIGN PATENTS ISSUED & PENDING

REVOLUTIONIZING THE WAY TIG PURGING IS DONE

1 PEEL

Peel liner to expose adhesive.

2 INSERT

Insert EZ Purge® dam inside pipe.

3 PRESS

Press tape along circumference of pipe wall.

FEATURING

ZAP TECHNOLOGY
Zero Air Permeability for Maximum Gas Retention

EPA APPROVED

CE APPROVED

- NO CUTTING
- NO MEASURING
- NO CONSTRUCTING
- READY-TO-USE
- PERFECTLY FORMED & SIZED EVERY TIME

Aquasol CORPORATION

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EZ Purge®

PRE-FORMED, SELF-ADHESIVE WATER SOLUBLE PURGE DAMS

FEATURING ZAP TECHNOLOGY Zero Air Permeability for Maximum Gas Retention
EPA APPROVED
CE APPROVED

FEATURES

Uniquely Engineered & Patented Design

- ZAP™ (Zero Air Permeability) Technology Maximizes Gas Retention
- Flat Design Enables Equal Distribution of Gases Across Body of Dam
- Side Walls Tapered to Fit Different Pipe Schedules
- Generous Portion of Water Soluble Tape Pre-Installed in Sections for Precise Alignment

Cost Effective

- Save Precious Labor Hours on Dam Construction
  - » Gathering Supplies
  - » Measuring
  - » Cutting
  - » Constructing
  - » Fitting
- Improve Project Timeliness
- Save on Gas Consumption
- Reduce Inventory Expenditures

Ease of Removal

- Made of Aquasol® Water Soluble Paper (Sodium Carboxy Methyl Cellulose and Wooden Pulp)
- Combined With Other Water Soluble Polymeric Composites for Added Strength
- 100% Biodegradable & Environmentally Friendly
- Dissolves Rapidly Leaving No Residue In The Pipeline

Aquasol® Water Soluble Paper and Tape and EZ Purge® can be placed in close proximity to the weld zone, thereby using less inert gas. The recommended distance for placement of the dams from the root gap is listed in the chart below:

RECOMMENDED PROXIMITY TO WELD JOINT

PIPE SIZE		RECOMMENDED DISTANCE	
ENGLISH	METRIC	ENGLISH	METRIC
2" - 8"	51 - 203 mm	6"	152 mm
10" - 22"	254 - 559 mm	8"	203 mm
24" - 36"	610 - 914 mm	12"	305 mm
40"+	1 m+	24"	610 mm

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INSTALLATION GUIDE

Even for the world's largest water soluble purge dam 84", installation is just minutes!

Repositioning

Carefully remove tape portion of dam from sidewall of pipe.

Move to desired location and apply additional Aquasol® Water Soluble Tape for reinforcement, if required.

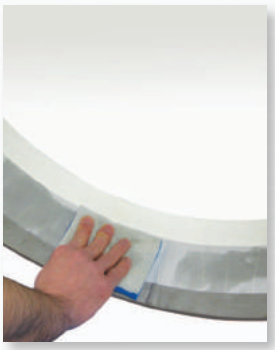
Adjusting to Create Proper Fit

Cut the tape portion of dam as it is being inserted.

Overlap the cut ends to create desired size. Repeat if necessary.

Activate the Water Soluble Tape

Moisten an ordinary sponge in water. Squeeze out excess water.



Lightly dab sponge along the water soluble tape portion of the dam.

The dampened sponge will reactivate the adhesive to ensure zero air permeability.

SPECIFICATIONS

EZ Purge® Non-Adhesive * ** ***

ITEM NO.	PIPE DIAMETER		CASE PACK*
	ENGLISH	METRIC	
EZP-.50	1/2"	13 mm	1,000
EZP-.75	3/4"	19 mm	1,000
EZP-1.0	1"	25 mm	1,000
EZP-1.25	1 1/4"	32 mm	1,000
EZP-1.50	1 1/2"	38 mm	1,000
EZP-2.0	2"	51 mm	1,000
EZP-2.5	2 1/2"	63 mm	1,000
EZP-3.0	3"	76 mm	1,000

*Custom Order **Only sold in full case quantity ***Does not include adhesive

EZ Purge® * **

ITEM NO.	PIPE DIAMETER		CASE PACK*
	ENGLISH	METRIC	
EZP-2	2"	51 mm	192
EZP-2.5**	2 1/2"	63 mm	192
EZP-3	3"	76 mm	192
EZP-4	4"	102 mm	48
EZP-5	5"	127 mm	48
EZP-6	6"	152 mm	48
EZP-8	8"	203 mm	48
EZP-10	10"	254 mm	48
EZP-12	12"	305 mm	48
EZP-14	14"	356 mm	24
EZP-16	16"	406 mm	24
EZP-18	18"	457 mm	24
EZP-20	20"	508 mm	24
EZP-22	22"	559 mm	24
EZP-24	24"	610 mm	24
EZP-26	26"	660 mm	24
EZP-28	28"	711 mm	24
EZP-30	30"	762 mm	24
EZP-32	32"	813 mm	24
EZP-36	36"	914 mm	24
EZP-40*	40"	1016 mm	10
EZP-42*	42"	1067 mm	10
EZP-44*	44"	1118 mm	10
EZP-48*	48"	1219 mm	10
EZP-52*	52"	1321 mm	10
EZP-56*	56"	1422 mm	10
EZP-60*	60"	1524 mm	10
EZP-64*	64"	1626 mm	10
EZP-72*	72"	1829 mm	10
EZP-84*	84"	2134 mm	10

*Sold in full or half case quantities **Custom sizes available upon request

EZP.B4.1013.R2

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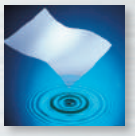

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MADE IN THE USA

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EZ Zone® Tape

PURGE GAS RETAINING TAPE

US & FOREIGN PATENTS PENDING

FOR CLEAN CONTAMINANT-FREE WELDING

HIGH HEAT RESISTANT

FEATURES

Adhesive Free Zone

- Weld Joint Free from Adhesive, Creating a Superior Weld

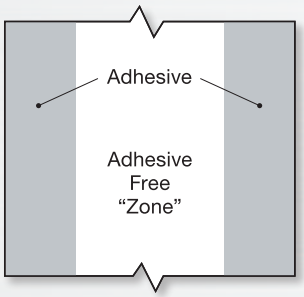
High Quality & Safe Components

- Halogen & Chlorofluorocarbon Free
- Improves the Safety of Your Work Environment
- 3 mil (75 micron) Foil Adheres and Conforms to Irregular Surfaces

High Heat Temperature Resistant

- Adhesive Portion of Aluminum Tape Withstands Temperatures Up to 500°F (260°C)

SIMPLY SEAL THE ROOT GAP



1 ***ALIGN***

- Place Adhesive Free Zone Over Root Gap
- Adhesive Edges Hold Tape in Place

2 ***INTRODUCE GAS***

- Insert Purge Gas Needle Into Root Gap
- Introduce Gas
- Evacuate O_2
- Commence Welding

Aquasol CORPORATION

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EZ Tape®

FULLY COATED ALUMINUM TAPE

Aquasol CORPORATION

The All Purpose Solution

- For Conventional Uses in the Field such as Heating, Air Conditioning, Refrigeration and Acting as a Vapor Barrier
- Capping Pipe Ends During Transport
- Controls Release of Gas by Sealing Root Gap

High Heat Temperature Resistant

- Aluminum Coated Adhesive Withstands Temperatures up to 500°F (260°C)

High Quality & Safe Components

- Halogen and Chlorofluorocarbon Free

PROMOTES SAFETY IN THE WORKPLACE

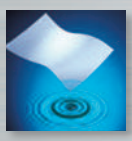
SPECIFICATIONS FOR ALUMINUM WELDING TAPE

EZ Tape® Types and Sizes

PRODUCT	ITEM NO.	DESCRIPTION	WIDTH		ADHESIVE FREE "ZONE" WIDTH		LENGTH	
			ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
	EZ-ZT 2.5	EZ Zone® Tape	2.5"	64 mm	1"	25 mm	75'	23 m
	EZ-ZT 4.0	EZ Zone® Tape	4.0"	102 mm	2"	51 mm	75'	23 m
	EZ-T 2.0	EZ Tape® Fully-coated	2.0"	51 mm	N/A		75'	23 m

▶ Heat Resistance:	Adhesive	500°F	260°C
	Aluminum Foil	1100°F	593°C
▶ Minimum Application Temperature		10°F	-12.5°C

For additional product information, quotations and ordering, please contact:



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SoluShim®

WATER SOLUBLE ALIGNMENT STICKS

US & FOREIGN PATENTS ISSUED & PENDING

FOR PERFECT & CONSISTENT PIPE & SEAM SPACING

FEATURES

- EPA Approved Aquasol® Water Soluble Composite Board
- Compatible with Any Metal
- Uniform in Thickness
- Highly Durable Yet Flexible
- Shape to Form Any Angle
- Place Between Plates, Pipes and Flanges to Maintain Perfect Gap

Traditional Method ▼
Using Welding Rod

Simple Solution ▼
Using SoluShim® Alignment Sticks

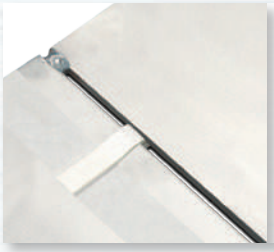

PLATE TO PLATE

NO WELDING
NO CUTTING
NO GRINDING
NO FOREIGN METAL CONTAMINATION

PIPE TO FLANGE

PIPE TO PIPE

Aquasol CORPORATION

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SoluShim®

WATER SOLUBLE ALIGNMENT STICKS

Aquasol CORPORATION

Spacer Characteristics

- Provides Required 1/8" Minumum Gap for Plate/ Pipe Projects As Required by AWS Code D1.6/D1.6M Stainless Steel Structural Code
- Highly Incompressable
- 100% Biodegradable & Environmentally Friendly
- Leaves Behind No Harmful Trace Elements

Spacer Installation & Removal

- Insert SoluShim® Sticks Between Plates to Create Required Spacing
- SoluShim® Sticks Can Be Bent to Form a 90˚ Angle (Secure with Aquasol® Water Soluble Tape if Necessary)
- Tack Weld the Joint As Normal Securing Even Gap
- Introduce Water to Dissolve and Easily Remove

ELIMINATE GUESSWORK IN PIPE FIT UP, ALLOWING FOR A PRECISE AND GUARANTEED MINIMUM GAP, EVERY TIME!

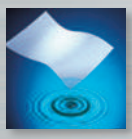
SPECIFICATIONS

SoluShim® Types and Sizes

ITEM NO.	THICKNESS		SIZE		PACKAGING	CASE PACK
	ENGLISH	METRIC	ENGLISH	METRIC		
SS-2-38-132	1/32"	0.8 mm	3/8" x 2"	9 mm x 50.5 mm	100 pieces/polybag	10 polybags per case (1000 pieces)
SS-2-38-16	1/16"	1.6 mm	3/8" x 2"	9 mm x 50.5 mm	100 pieces/polybag	10 polybags per case (1000 pieces)
SS-2-38-332	3/32"	2.0 mm	3/8" x 2"	9 mm x 50.5 mm	100 pieces/polybag	10 polybags per case (1000 pieces)
SS-2-38-18	1/8"	3.3 mm	3/8" x 2"	9 mm x 50.5 mm	100 pieces/polybag	10 polybags per case (1000 pieces)
SS-4-38-132	1/32"	0.8 mm	3/8" x 4"	9 mm x 101 mm	50 pieces/polybag	20 polybags per case (1000 pieces)
SS-4-38-16	1/16"	1.6 mm	3/8" x 4"	9 mm x 101 mm	50 pieces/polybag	20 polybags per case (1000 pieces)
SS-4-38-332	3/32"	2.0 mm	3/8" x 4"	9 mm x 101 mm	50 pieces/polybag	20 polybags per case (1000 pieces)
SS-4-38-18	1/8"	3.3 mm	3/8" x 4"	9 mm x 101 mm	50 pieces/polybag	20 polybags per case (1000 pieces)

*Custom thicknesses and sizes available upon request.

For additional product information, quotations and ordering, please contact:



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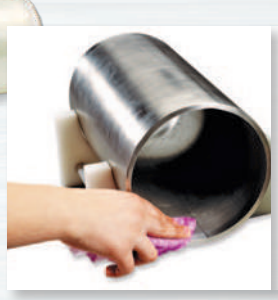
Liquifilm®

WATER SOLUBLE PURGE FILM AND ADHESIVE

THE TRANSPARENT & FLEXIBLE PURGE GAS BARRIER FOR TIG WELDING



1 CLEAN

Clean pipe.

2 APPLY

Apply Liquifilm® Water Soluble Adhesive to inside of pipe.

3 CUT

Cut Liquifilm® in a circle 1.3 times greater than pipe diameter.

4 PRESS

Press glossy surface of Liquifilm® to tacky adhesive inside pipe.

AVAILABLE IN BRICK & KIT FORMATS

Kit Contents:

- Liquifilm® Water Soluble Film Wound on Core
- Two 250 ml Bottles of Liquifilm® Water Soluble Adhesive
- Cutting Knife
- Instruction Sheet

Aquasol CORPORATION

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Liquifilm®

WATER SOLUBLE PURGE FILM AND ADHESIVE

Aquasol CORPORATION

Impenetrable Purge Barrier

- Excellent Barrier for Retaining Noble Gas (Argon or Argon/Helium Mix)

Flexible & Robust

- For Use on Stainless, Duplex and Chromium Steels & Titanium Alloys
- Can Be Punctured for Gas Inlets and Outlets with Little Risk of Tearing
- High Resistance to Pressure, Allowing for Greater Positive Pressure to be Maintained in Weld Area

Impenetrable Purge Barrier

- For Ease of Viewing During Welding Process

Ease of Removal

- Rapidly Dissolves in Hot or Cold Water
- Leaves No Residue In The Pipeline

Safe

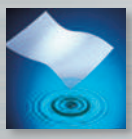
- Suitable for Nuclear, Aerospace, and Other Applications

SPECIFICATIONS FOR LIQUIFILM® WATER SOLUBLE PURGE FILM AND ADHESIVE

LiquiFilm® Types and Sizes

PRODUCT	ITEM NO.	DESCRIPTION	DIMENSIONS		CASE PACK
			ENGLISH	METRIC	
	ASWF-1/20RG	Liquifilm® Water Soluble Film Kit	39" x 65'	1 m x 20 m	12
	ASWF-1/20B	Liquifilm® Water Soluble Film Brick Format	39" x 65'	1 m x 20 m	12
	AWSG-500	Liquifilm® Water Soluble Adhesive	16 fl oz	500 ml/bottle	24
	AWSG-250	Liquifilm® Water Soluble Adhesive	8 fl oz	250 ml/bottle	48

For additional product information, quotations and ordering, please contact:



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MADE IN THE USA

MADE IN THE USA

Fiback®

FIBERGLASS WELD BACKING TAPE

Outer adhesive strips adhere to the area surrounding the root gap.

Woven fiberglass strip is applied to the back of the weld to eliminate or reduce the need for back purging and create a weld pool enclosure.

HIGH HEAT RESISTANT

ELIMINATE BACK PURGING

FEATURES

High Heat Resistant

- Fiberglass Withstands Temperatures Up To 1022˚F (550˚C)

High Quality & Safe Components

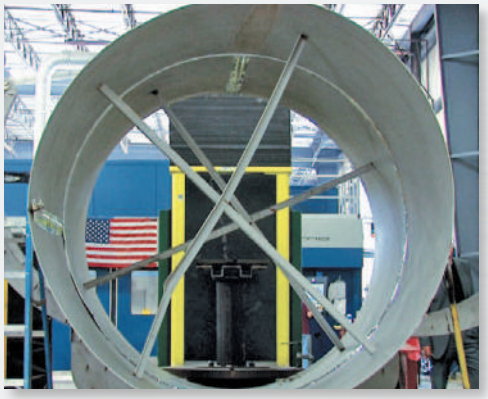
- Halogen Free, Virgin Aluminum
- Halogen and Chlorofluorcarbon Free Acrylic Base Adhesive

Saves Time/Gas

- Significantly Reduces
  - » Setup Time
  - » Weld Clean Up

Efficiency

- Increases Weld Productivity
- Reduces Costs



Flexible

- Conforms to a Number of Surfaces and Shapes
- Ideal for Plate, Sheet and Pipe Welding
- Fiback® Can Be Used for Pressure Vessels, Large Bore Pipes, Shipbuilding, Fabrication and Many More Applications

AVAILABLE IN 2 AMPERAGES

200 AMP Light Duty

600 AMP Heavy Duty

Aquasol CORPORATION

aquasol**welding**.com

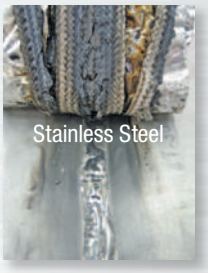
Fiback®

FIBERGLASS WELD BACKING TAPE

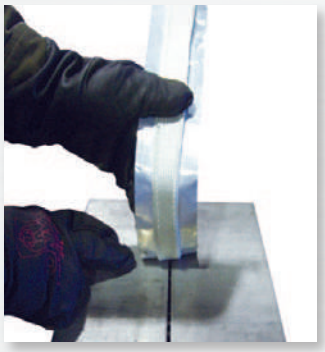
Aquasol CORPORATION

Compatibility & Process Applications

- Suitable for SMAW (stick), TIG and MIG Welding Processes
- Compatible with Carbon, Aluminum Alloy and Stainless Steel



HOW TO USE FIBACK®



1 ALIGN

Align desired base metals with the required root gap.

Center the fiberglass strip over the backside of the root gap.

2 POSITION

Position the fiberglass strip in a convex shape away from the backside of the weld area to contain the purge gas from the torch tip but avoid consuming the material.

3 PRESS

Press adhesive sections of tape along sides, centering fiberglass strip over weld joint and continuing over the entire length of the metals. Upon completion of welding, allow the piece to cool before removing tape.

SPECIFICATIONS

Fiback® Types and Sizes

ITEM NO.	DESCRIPTION	WIDTH	FIBERGLASS CENTER STRIP WIDTH	LENGTH
AFBT-2.5-200	Fiback® Weld Backing Tape 200 AMP	2.5" (64 mm)	1 .125" (28.5 mm)	82' (25 m)
AFBT-4.0-200	Fiback® Weld Backing Tape 200 AMP	4.0" (102 mm)	1.5" (38 mm)	82' (25 m)
AFBT-2.5	Fiback® Weld Backing Tape 600 AMP	2.5" (64 mm)	1 .125" (28.5 mm)	41' 12.5 m)
AFBT-4.0	Fiback® Weld Backing Tape 600 AMP	4.0" (102 mm)	1.5' (38 mm)	41' (12.5 m)

Heat Resistance

Adhesive	500°F	260°C
Aluminum Foil	1100°F	593°C
Fiberglass Strip	1022°F	550°C

For additional product information, quotations and ordering, please contact:

Aquasol Corporation

80 Thompson Street
N. Tonawanda, NY 14120 USA

Toll Free: 1.800.564.WELD (9353)
Phone: 716.564.8888
Fax: 716.564.8889

Email: info@aquasolcorporation.com
aquasolwelding.com

Distributed By:

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MADE IN THE USA

MADE IN THE USA

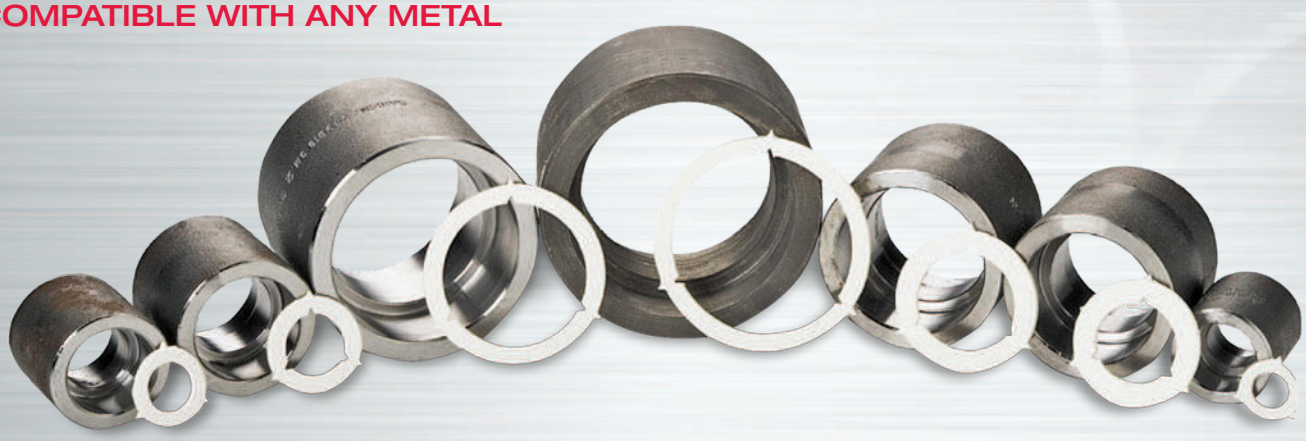
SoluGap®

WATER SOLUBLE SOCKET WELD SPACER RING

US & FOREIGN PATENTS ISSUED

FOR A PRECISE & EVEN GAP EVERY TIME

DISTINCTIVE DESIGN
COMPATIBLE WITH ANY METAL



SteelSpace®

CERTIFIED 316L STAINLESS STEEL SOCKET WELD SPACER RING

TRADITIONAL DESIGN

FEATURES

- Both SoluGap and SteelSpace Provide the 1/16" (1.6 mm) Minimum Gap Required by ANSI 31.1, Section III, ASME, US Navy & Military Codes
- Eliminate Scribing, Measuring & Fitting
- Eliminate & Reduce Cracked Welds
- Hollow Center Enables Viewing During Welding

Aquasol CORPORATION

aquasolwelding.com

SteelSpace®

CERTIFIED 316L STAINLESS STEEL SOCKET WELD SPACER RING

TRADITIONAL DESIGN & TRUSTED CHOICE

FEATURES

- Provides the 1/16" (1.6 mm) Minimum Gap
- 316L Stainless Steel Construction
- Second Most Common Stainless Steel Grade
- Known as “Marine Grade” Due to Its Increased Resistance to Chloride Corrosion
- Ideal for Use in Food, Pharmaceutical, Nuclear and Aeronautical Applications
- Spring Tension Holds Rings Securely in Place
- Becomes Permanent Part of The Joint

JUST PUSH-IN-PLACE

INSTRUCTIONS FOR USE:

1 ***SQUEEZE***

Squeeze outer edges of SteelSpace® Ring.

2 ***PUSH IN PLACE***

Push in place to align evenly against socket seat

3 ***ALIGN***

Once aligned, commence welding.

Aquasol CORPORATION

SoluGap®

WATER SOLUBLE SOCKET WELD SPACER RING

DISTINCTIVE DESIGN COMPATIBLE WITH ANY METAL

FEATURES

- Provides the 1/16" (1.6 mm) Minimum Gap
- Also Available in 1/8" (3.2 mm) Thickness
- Made of Aquasol® Water Soluble Composite Board
- Dissolves Rapidly & Completely In Water
- Does Not Corrode
- Firm Yet Compressible
- Unique 3-point Tabs Secure Placement Regardless of Pipe Orientation

JUST SNAP-IN-PLACE

INSTRUCTIONS FOR USE:

1 ***POSITION***

Position ring inside socket.

2 ***SNAP IN PLACE***

Tabbed edges fit snugly and snap-in-place.

3 ***STAY IN PLACE***

SoluGap® Socket Rings stay in place, even when the socket is sideways or inverted.

Aquasol CORPORATION

SPECIFICATIONS

SoluGap® Water Soluble Socket Weld Spacer Ring

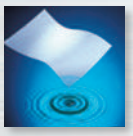
ITEM NO.	DIAMETER		THICKNESS		PACKAGING
	ENGLISH	METRIC	ENGLISH	METRIC	
SGP-0.5	1/2"	20 mm	1/16"	1.6 mm	50 pcs/bag
SGP-0.75	3/4"	25 mm	1/16"	1.6 mm	50 pcs/bag
SGP-1.0	1"	32 mm	1/16"	1.6 mm	50 pcs/bag
SGP-1.25	1 1/4"	40 mm	1/16"	1.6 mm	50 pcs/bag
SGP-1.50	1 1/2"	50 mm	1/16"	1.6 mm	50 pcs/bag
SGP-1.75	1 3/4"	57 mm	1/16"	1.6 mm	50 pcs/bag
SGP-2.0	2"	63 mm	1/16"	1.6 mm	50 pcs/bag
SGP-2.50	2 1/2"	75 mm	1/16"	1.6 mm	50 pcs/bag
SGP-0.5/2	1/2"	20 mm	1/8"	3.3 mm	50 pcs/bag
SGP-0.75/2	3/4"	25 mm	1/8"	3.3 mm	50 pcs/bag
SGP-1.0/2	1"	32 mm	1/8"	3.3 mm	50 pcs/bag
SGP-1.25/2	1 1/4"	40 mm	1/8"	3.3 mm	50 pcs/bag
SGP-1.50/2	1 1/2"	50 mm	1/8"	3.3 mm	50 pcs/bag
SGP-1.75/2	1 3/4"	57 mm	1/8"	3.3 mm	50 pcs/bag
SGP-2.0/2	2"	63 mm	1/8"	3.3 mm	50 pcs/bag
SGP-2.50/2	2 1/2"	75 mm	1/8"	3.3 mm	50 pcs/bag

SteelSpace® Certified 316L Stainless Steel Socket Weld Spacer Ring

ITEM NO.	DIAMETER		THICKNESS		PACKAGING
	ENGLISH	METRIC	ENGLISH	METRIC	
STS-0.5	1/2"	20 mm	1/16"	1.6 mm	25 pcs/bag
STS-0.75	3/4"	25 mm	1/16"	1.6 mm	25 pcs/bag
STS-1.0	1"	32 mm	1/16"	1.6 mm	25 pcs/bag
STS-1.25	1 1/4"	40 mm	1/16"	1.6 mm	25 pcs/bag
STS-1.50	1 1/2"	50 mm	1/16"	1.6 mm	25 pcs/bag
STS-2.0	2"	63 mm	1/16"	1.6 mm	25 pcs/bag

For additional product information, quotations and ordering, please contact:

Aquasol Corporation



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MADE IN THE USA

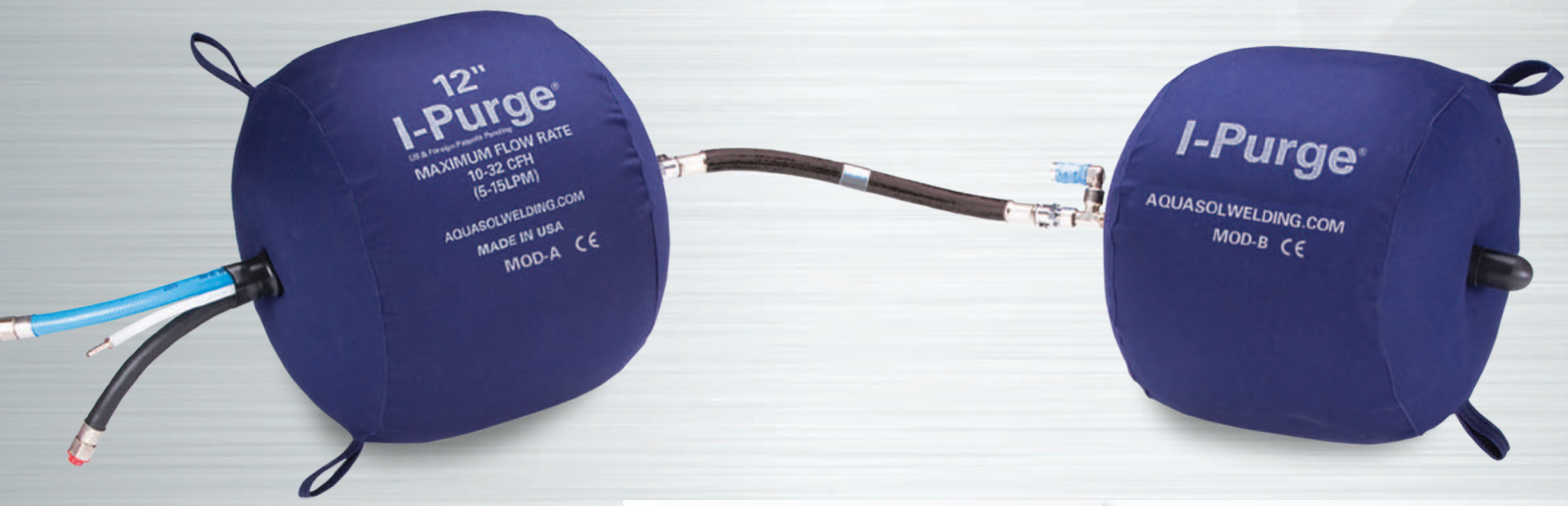
MADE IN THE USA

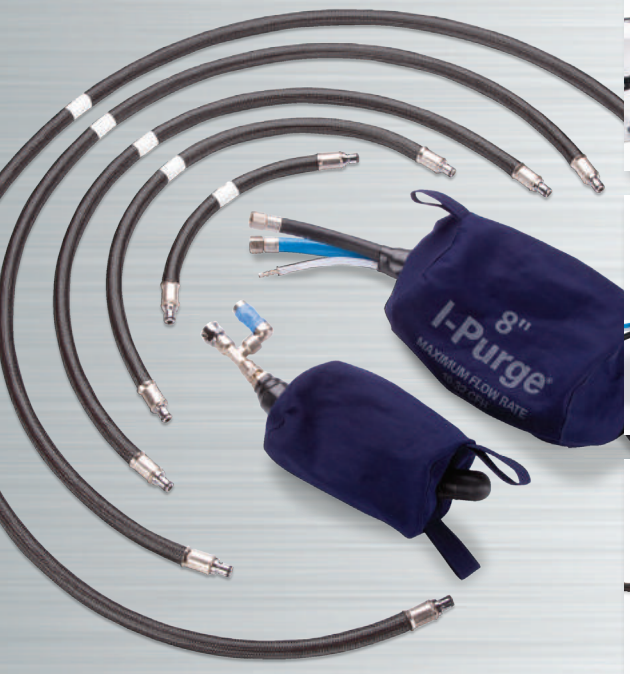
I-Purge®

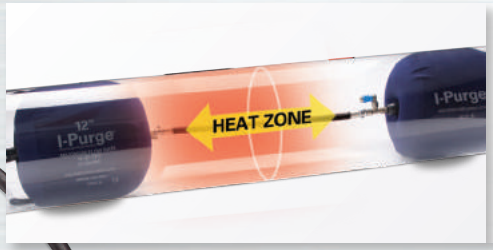
MODULAR INFLATABLE BLADDER SYSTEM

US & FOREIGN PATENTS ISSUED & PENDING
CE APPROVED

THE MOST VERSATILE & ADAPTABLE SOLUTION FOR PIPE PURGING

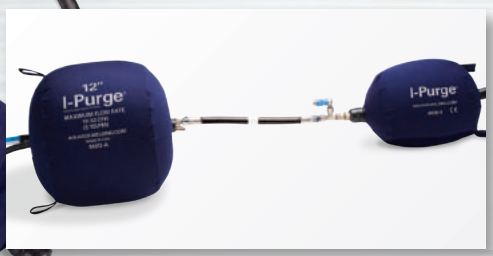






EXTENDED HARNESS

To Accommodate Heat Zones



I-PURGE® REDUCER

For Unique Pipe Combinations

I-PURGE ISOLATOR®

One Sided Purge Plug

Aquasol CORPORATION

aquasol**welding**.com

I-Purge®

MODULAR INFLATABLE BLADDER SYSTEM

Module A

Module B

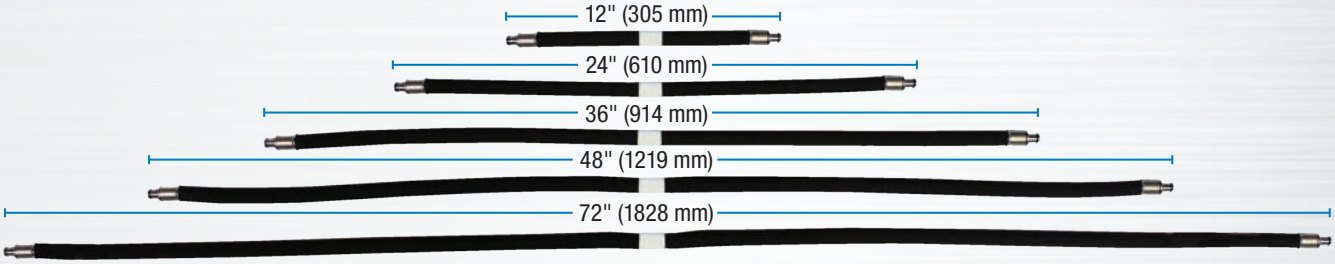
Quick Connect Interchangeable Fittings

- State-of-the-Art Technology
- Snap-In Place In Seconds
- Corrosion Resistant

Inflatable Bladders Modules A & B

- Spark Resistant Durable Exterior Cover
- Heavy-Duty Interior Inflatable Bag
- Combine Sizes to Create a Unique Configuration

HIGH HEAT RESISTANT HARNESS: Available Lengths



- Internal Hose and Protective External Fiberglass Sleeve Capable of Withstanding Temperatures up to 1200°F (650°C)
- Extended Length Harnesses Available to Accommodate Pre-heating and High Heat Applications
- Flexible Bridge Harness Easily Navigates Through Pipes, Including Elbows & Tees Over 90°
- Kink Resistant Hose Assures Continuous Gas Supply
- Complete With Luminescent Indicator for Accurate Alignment at Root Gap

Proprietary Relief Valve Technology

- Preset Relief Valve Allows for Precise Flow Rates
- Decreases The Risk Of Over-Inflation
- Low Profile Relief Valve Available on 2" and 3" Models

Patent-Pending Inert Gas Diffuser*

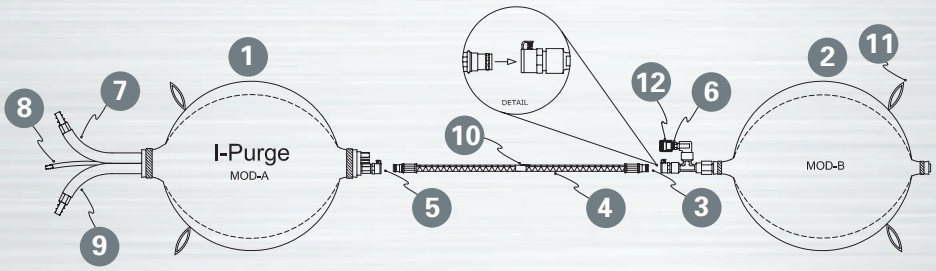
- Disperses Inert Gas in all Directions Within the Weld Zone, Reducing Turbulence
- Improves Weld Quality

*Diffuser not available on 2" and 3" Models

Tri-Flow Inner Tubing System (Blue, Black & Exhaust Hoses)

- Improves Efficiency of Gas Flow In & Out of Purge Area
- Separate Connections for: Inflation of Bladders, Flooding of Weld Zone with Inert Gas, Exhaust (Connects to Oxygen Monitor for O2 Analysis)
- Expedites Purging Process
- Optimum Seal Strength Achieved

I-PURGE® MODULAR SYSTEM



I-Purge® Modular System Components:

Equipped with the Most Advanced, Interchangeable Components

1. Module A
2. Module B
3. Quick Connection to Module B
4. Stainless Steel Bridge Harness
5. Quick Connection to Module A
6. Relief Valve
7. Direct Purge (Black) Hose
8. Exhaust Monitor Connection
9. Inflation & Purge (Blue) Hose
10. Luminescent Indicator
11. Pull Loops
12. Gas Diffuser

I-Purge® Features:

- Unique Modular Design for a Customized Solution
- Easy Change and Replacement of Components
- Strong Pull Loops for Insertion and Removal
- Carrying Bag for Protection and Storage
- Manufactured in the USA from the Highest Quality Materials
- Long Term, Reusable Solution

I-PURGE ISOLATOR® INFLATABLE PIPE STOPPER & SINGLE PURGE BLADDER

- **Accommodates a wide range of applications, including:**
  - » pipe system servicing, cleaning, inspection and sealing
- **Industries:**
  - » Oil and Petrochemical
  - » Water, Gas and Drainage
  - » Construction

THE PATENT-PENDING TECHNOLOGY OF THE **I-PURGE® MODULAR SYSTEM** ENABLES YOU TO ACCOMPLISH A NUMBER OF DIFFERENT PURGE REQUIREMENTS WITH **ONE INTERCHANGEABLE SOLUTION**

SPECIFICATIONS

Aquasol CORPORATION

I-Purge® Standard Inflatable Systems (Sold as a Complete System)

ITEM NO.	DIMENSIONS		STANDARD HARNESS LENGTH		DESCRIPTION
	ENGLISH	METRIC	ENGLISH	METRIC	
ABLD 2*	2"	51 mm	11"	279 mm	2" I-Purge Double Purge Bag System with High Heat Harness
ABLD 3*	3"	76 mm	11"	279 mm	3" I-Purge Double Purge Bag System with High Heat Harness
ABLD 4	4"	102 mm	11"	279 mm	4" I-Purge Double Purge Bag System with High Heat Harness
ABLD 5	5"	127 mm	11"	279 mm	5" I-Purge Double Purge Bag System with High Heat Harness
ABLD 6	6"	152 mm	11"	279 mm	6" I-Purge Double Purge Bag System with High Heat Harness
ABLD 8	8"	203 mm	11"	279 mm	8" I-Purge Double Purge Bag System with High Heat Harness
ABLD 10	10"	254 mm	12"	305 mm	10" I-Purge Double Purge Bag System with High Heat Harness
ABLD 12	12"	305 mm	12"	305 mm	12" I-Purge Double Purge Bag System with High Heat Harness
ABLD 14	14"	356 mm	16"	406 mm	14" I-Purge Double Purge Bag System with High Heat Harness
ABLD 16	16"	406 mm	16"	406 mm	16" I-Purge Double Purge Bag System with High Heat Harness
ABLD 18	18"	457 mm	16"	406 mm	18" I-Purge Double Purge Bag System with High Heat Harness
ABLD 20	20"	508 mm	18"	457 mm	20" I-Purge Double Purge Bag System with High Heat Harness
ABLD 22	22"	559 mm	18"	457 mm	22" I-Purge Double Purge Bag System with High Heat Harness
ABLD 24	24"	610 mm	18"	457 mm	24" I-Purge Double Purge Bag System with High Heat Harness
ABLD 26	26"	660 mm	20"	509 mm	26" I-Purge Double Purge Bag System with High Heat Harness
ABLD 28	28"	711 mm	20"	509 mm	28" I-Purge Double Purge Bag System with High Heat Harness
ABLD 30	30"	762 mm	20"	509 mm	30" I-Purge Double Purge Bag System with High Heat Harness
ABLD 32	32"	813 mm	20"	509 mm	32" I-Purge Double Purge Bag System with High Heat Harness
ABLD 34	34"	864 mm	20"	509 mm	34" I-Purge Double Purge Bag System with High Heat Harness
ABLD 36	36"	914 mm	20"	509 mm	36" I-Purge Double Purge Bag System with High Heat Harness
ABLD 38	38"	965 mm	24"	610 mm	38" I-Purge Double Purge Bag System with High Heat Harness
ABLD 40	40"	1016 mm	24"	610 mm	40" I-Purge Double Purge Bag System with High Heat Harness
ABLD 42	42"	1066 mm	24"	610 mm	42" I-Purge Double Purge Bag System with High Heat Harness
ABLD 44	44"	1117 mm	30"	762 mm	44" I-Purge Double Purge Bag System with High Heat Harness
ABLD 46	46"	1168 mm	30"	762 mm	46" I-Purge Double Purge Bag System with High Heat Harness
ABLD 48	48"	1219 mm	30"	762 mm	48" I-Purge Double Purge Bag System with High Heat Harness

Modular Components (ABLD-Size-MOD A and ABLD-Size-MOD B) Sold Separately

I-Purge Isolator®

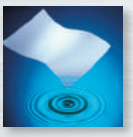
ITEM NO.	DIMENSIONS		DESCRIPTION
	ENGLISH	METRIC	
ISO 2	2"	51 mm	2" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 3	3"	76 mm	3" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 4	4"	102 mm	4" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 5	5"	127 mm	5" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 6	6"	152 mm	6" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 8	8"	203 mm	8" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 10	10"	254 mm	10" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 12	12"	305 mm	12" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 14	14"	356 mm	14" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 16	16"	406 mm	16" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 18	18"	457 mm	18" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 20	20"	508 mm	20" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 22	22"	559 mm	22" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 24	24"	610 mm	24" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 26	26"	660 mm	26" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 28	28"	711 mm	28" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 30	30"	765 mm	30" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 32	32"	813 mm	32" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 34	34"	863 mm	34" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 36	36"	914 mm	36" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 38	38"	965 mm	38" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 40	40"	1016 mm	40" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 42	42"	1066 mm	42" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 44	44"	1117 mm	44" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 46	46"	1168 mm	46" I-Purge Isolator One-Sided Plug with 10' Hose and Valve
ISO 48	48"	1219 mm	48" I-Purge Isolator One-Sided Plug with 10' Hose and Valve

Accessory Components Optional Harness Lengths

ITEM NO.	DIMENSIONS		DESCRIPTION
	ENGLISH	METRIC	
ABLD-ELH-24	24"	610 mm	24" (2') Extended Length High Heat Harness
ABLD-ELH-36	36"	914 mm	36" (3') Extended Length High Heat Harness
ABLD-ELH-48	48"	1219 mm	48" (4') Extended Length High Heat Harness
ABLD-ELH-72	72"	1828 mm	72" (6') Extended Length High Heat Harness
ABLD-ELH-CUSTOM	**Any Size**	**Any Size**	**Custom Lengths Available Upon Request**
ABLD-CNADP	NA	NA	1/4" Female MPT to 1/4" Female BSPP Conversion

For additional product information, quotations and ordering, please contact:

Aquasol Corporation



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I-Purge®X

MODULAR INFLATABLE BLADDER SYSTEM

US & FOREIGN PATENTS ISSUED & PENDING
CE APPROVED

BET FEATURING BLADDER EXPANSION TECHNOLOGY CE APPROVED

ALL NEW EXPANDABLE & EXTENDABLE MODULAR SYSTEM

ONE SYSTEM FITS MULTIPLE PIPE SIZES

I-PURGE®X REDUCER

Combine Pipes of Different Diameters to Create a Unique Configuration

Aquasol CORPORATION

aquasol**welding**.com

I-Purge®X

MODULAR INFLATABLE BLADDER SYSTEM

Module A

Module B

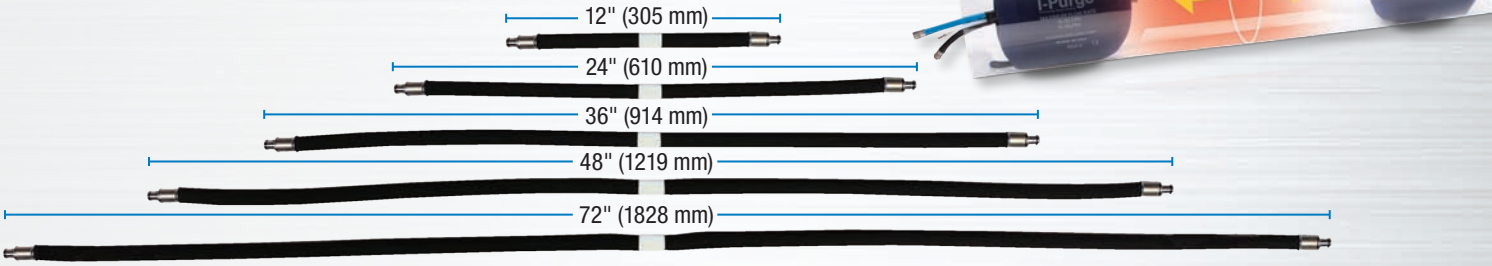
Quick Connect Interchangeable Fittings

- State-of-the-Art Technology
- Snap-In Place In Seconds
- Corrosion Resistant

Inflatable Bladders Modules A & B

- One Size Expands and Contracts to Fit Multiple Pipe Sizes
- Spark Resistant Exterior Cover Does Not Melt
- Heavy-Duty Interior Inflatable Bag

HIGH HEAT RESISTANT HARNESS: Available Lengths



- Internal Hose and Protective External Fiberglass Sleeve Capable of Withstanding Temperatures up to 1200°F (650°C)
- Extended Length Harnesses Available to Accommodate Pre-heating and High Heat Applications
- Flexible Bridge Harness Easily Navigates Through Pipes, Including Elbows & Tees Over 90°
- Kink Resistant Hose Assures Continuous Gas Supply
- Complete With Luminescent Indicator for Accurate Alignment at Root Gap

Proprietary Relief Valve Technology

- Preset Relief Valve Allows for Precise Flow Rates
- Decreases The Risk Of Over-Inflation
- Low Profile Relief Valve Available on 2" and 3" Models

Patent-Pending Inert Gas Diffuser*

- Disperses Inert Gas in all Directions Within the Weld Zone, Reducing Turbulence
- Improves Weld Quality

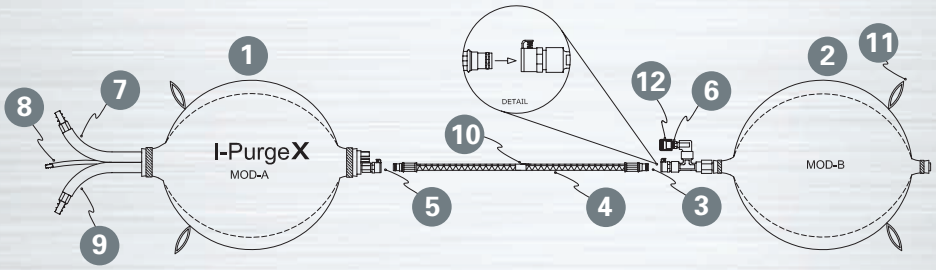
*Diffuser not available on 2" and 3" Models

Tri-Flow Inner Tubing System (Blue, Black & Exhaust Hoses)

- Improves Efficiency of Gas Flow In & Out of Purge Area
- Separate Connections for:
- Inflation of Bladders, Flooding of Weld Zone with Inert Gas, Exhaust (Connects to Oxygen Monitor for O2 Analysis)
- Expedites Purging Process
- Optimum Seal Strength Achieved

I-PURGE®X MODULAR SYSTEM

EQUIPPED WITH BLADDER EXPANSION TECHNOLOGY



I-Purge®X Modular System Components:

1. Module A
2. Module B
3. Quick Connection to Module B
4. Stainless Steel Bridge Harness
5. Quick Connection to Module A
6. Relief Valve
7. Direct Purge (Black) Hose
8. Exhaust Monitor Connection
9. Inflation & Purge (Blue) Hose
10. Luminescent Indicator
11. Pull Loops
12. Gas Diffuser

I-Purge®X Features:

- Bladder Expansion Technology Enables One Unit to Fit Multiple Pipe Sizes
- Unique Modular Design for a Customized Solution
- Easy Change and Replacement of Components
- Strong Pull Loops for Insertion and Removal
- Carrying Bag for Protection and Storage
- Manufactured in the USA from the Highest Quality Materials
- Long Term, Reusable Solution

I-PURGEX ISOLATOR® INFLATABLE PIPE STOPPER & SINGLE PURGE BLADDER

- **Accommodates a wide range of applications, including:**
  - » pipe system servicing, cleaning, inspection and sealing
- **Industries:**
  - » Oil and Petrochemical
  - » Water, Gas and Drainage
  - » Construction

EASY TO USE. REQUIRES NO TOOLS.
EXPANDABLE, EXTENDABLE & EXTRAORDINARY!

Aquasol CORPORATION

SPECIFICATIONS

I-Purge®X Modular Inflatable System (Sold as a Complete System)

ITEM NO.	MINIMUM DIAMETER		MAXIMUM DIAMETER		STANDARD HARNESS LENGTH		DESCRIPTION
	ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC	
XABLD 2-3	2"	51 mm	3"	76 mm	11"	279 mm	2-3" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 4-6	4"	102 mm	6"	152 mm	11"	279 mm	4-6" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 8-12	8"	203 mm	12"	305 mm	11"	279 mm	8-12" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 14-18	14"	356 mm	18"	457 mm	12"	305 mm	14-18" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 20-26	20"	509 mm	26"	660 mm	16"	406 mm	20-26" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 28-36	28"	711 mm	36"	914 mm	20"	509 mm	28-36" I-PurgeX Expandable Double Purge Bag System with High Heat Harness
XABLD 38-48	38"	965 mm	48"	1219 mm	24"	610 mm	38-48" I-PurgeX Expandable Double Purge Bag System with High Heat Harness

I-PurgeX Isolator®

ITEM NO.	DIMENSIONS		DESCRIPTION
	ENGLISH	METRIC	
XISO 2-3	2-3"	51-76 mm	2-3" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 4-6	4-6"	102-152 mm	4-6" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 8-12	8-12"	203-305 mm	8-12" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 14-18	14-18"	356-457 mm	14-18" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 20-26	20-26"	509-660 mm	20-26" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 28-36	28-36"	711-914 mm	28-36" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve
XISO 38-48	38-48"	965-1219 mm	38-48" I-PurgeX Isolator One-Sided Plug with 10' Hose and Valve

I-Purge®X Modular System Components (Sold as Separate Parts)

ITEM NO. MODULE A	ITEM NO. MODULE B	DIMENSIONS		DESCRIPTION
		ENGLISH	METRIC	
XABLD-2 MOD-A	XABLD-2 MOD-B	2"	51 mm	2" I-PurgeX Module A or B
XABLD-4 MOD-A	XABLD-4 MOD-B	4"	102 mm	4" I-PurgeX Module A or B
XABLD-8 MOD-A	XABLD-8 MOD-B	8"	203 mm	8" I-PurgeX Module A or B
XABLD-14 MOD-A	XABLD-14 MOD-B	14"	356 mm	14" I-PurgeX Module A or B
XABLD-20 MOD-A	XABLD-20 MOD-B	20"	509 mm	20" I-PurgeX Module A or B
XABLD-28 MOD-A	XABLD-28 MOD-B	28"	711 mm	28" I-PurgeX Module A or B
XABLD-38 MOD-A	XABLD-38 MOD-B	38"	965 mm	38" I-PurgeX Module A or B

Accessory Components Optional Harness Lengths

ITEM NO.	DIMENSIONS		DESCRIPTION
	ENGLISH	METRIC	
ABLD-ELH-24	24"	610 mm	24" (2') Extended Length High Heat Harness
ABLD-ELH-36	36"	914 mm	36" (3') Extended Length High Heat Harness
ABLD-ELH-48	48"	1219 mm	48" (4') Extended Length High Heat Harness
ABLD-ELH-72	72"	1828 mm	72" (6') Extended Length High Heat Harness
ABLD-ELH-CUSTOM	**Any Size**	**Any Size**	**Custom Lengths Available Upon Request**
ABLD-CNADP	NA	NA	1/4" Female MPT to 1/4" Female BSPP Conversion

For additional product information, quotations and ordering, please contact:

Aquasol Corporation

80 Thompson Street
N. Tonawanda, NY 14120 USA

Toll Free: 1.800.564.WELD (9353)
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aquasolwelding.com

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Sustaining Company Member

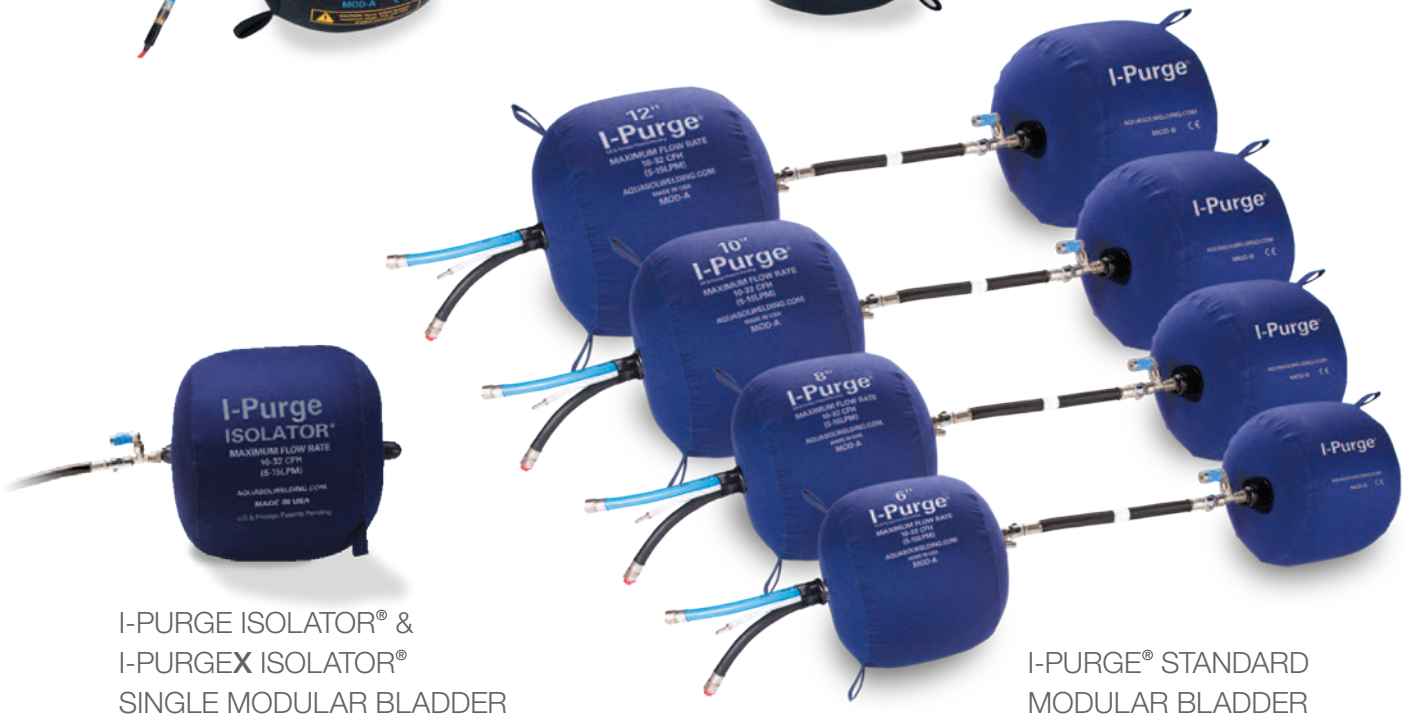
MADE IN THE USA

I-Purge® AND I-Purge®X

INFLATABLE MODULAR BLADDER SYSTEMS

OPERATIONS MANUAL

I-PURGE®**X** EXPANDABLE
MODULAR BLADDER



I-PURGE ISOLATOR® &
I-PURGE**X** ISOLATOR®
SINGLE MODULAR BLADDER

I-PURGE® STANDARD
MODULAR BLADDER

Made in the U.S.A.
U.S. & Foreign Patents Pending
CE Approved

Aquasol
CORPORATION

Table of Contents

Important Safety Information

PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE ATTEMPTING INSTALLATION OR OPERATION.

This system is used in an environment where high pressure gases and high voltage are present. I-Purge® Modular Systems are not innately dangerous products, unless used in a manner inconsistent with the intended purpose. Please follow these safety precautions to reduce the risk of injury to persons or property.

OPERATION:

- Improper use may cause the unit to become unstable, leading to possible damage or injury.
- Do not use the unit for anything other than its specific intended use.
- Do not operate the unit in a pipe that is unclean and/or has sharp edges.

WARNING:

- Do not exceed reccommended flow rates for inflation or purging. See pages 18 and 19 for instructions on maintaining proper flow rates.
- Do not exceed the maximum inflation size for I-Purge®**X**.
- Do not attempt to override any factory settings on the system. Tampering with any of the safety devices will nullify the product warranty and jeopardize personal safety.

Welcome

Thank you for purchasing an I-Purge®, I-Purge®X, I-Purge Isolator® or I-PurgeX Isolator® Inflatable Modular Bladder System from the Aquasol Corporation.

The I-Purge Modular System is a CE approved inflatable bladder. The interchangeable and expandable I-Purge modules allow versatility unlike any other system. The system includes a high-heat harness, a patent-pending gas diffuser and other advanced features, making Aquasol's I-Purge a superior purging product.

For best results and enforcement of Aquasol's warranty, please read instructions prior to use.

The I-Purge Modular Systems are designed for easy operation and maintenance. All personnel using an I-Purge system should read this manual to become more familiar with proper operation.

For further details regarding the maintenance and in-field service of I-Purge, please contact the Aquasol Corporation Customer Service Department.

If you have questions or comments, please contact us at:

Aquasol Corporation
Attn: Customer Service Department
80 Thompson Street
N. Tonawanda, NY 14120 USA
Toll Free: 1.800.564.WELD (9353)
Phone: 716.564.8888
Fax: 716.564.8889
Email: info@aquasolcorporation.com
Visit us at www.aquasolwelding.com

Item ID: _____

Item Serial No.: _____

Invoice No.: _____

Ship Date: _____

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Warranty

I-Purge®, I-Purge®**X**, I-Purge Isolator® and I-Purge**X** Isolator® Inflatable Modular Bladder Systems

All units and components are factory inspected and tested for quality assurance.

Aquasol Corporation warrants to the purchaser that the I-Purge Modular System is free from defects in material and workmanship for a period of thirty (30) days from the date of shipment (stated on page 4).

Aquasol's liability is limited to the repair or replacement, at our factory, of parts found to be defective within the warranty period, as determined by Aquasol Corporation. The parts will be repaired or replaced free of charge if a Returned Goods Inspection (RGI) is issued and the unit is shipped prepaid to the Aquasol Corporation Customer Service Department. **This warranty is void if the product has been subject to misuse or abuse, including but not limited to:**

1. Tampering with the pre-set relief valve, including breaking or removing the blue tamper seal, causing the bladders to over inflate and burst.
2. Setting the inflation gas flow rate beyond the recommended value as listed on pages 18 and 19.
3. Exposing the inflatable bladders to temperature levels above 250°F (120°C).
4. Exposing any part of the unit to sharp objects and/or unprepared surfaces which may tear, puncture, or damage the purge unit.
5. In addition, submitting either the unit in its entirety and/or a portion of the unit to excessive force of any type.
6. Altering or removing the identifying markings on the product label.
7. Repairs which were not performed by the Aquasol Corporation or by one of its authorized dealers.

The seller assumes no liability for consequential damages of any kind, and the buyer, by acceptance through purchase of this product, will assume all liability for the consequences of its use or misuse by the buyer, their employees, or others.

Aquasol Corporation reserves the right to use any materials in the manufacture, repair or service of the products and to modify the design as deemed suitable, in so far as these materials or modifications maintain the stated warranty.

The Aquasol Corporation will not assume any liability for misuse due to operator error.

THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE.

Product Overview

I-Purge® Inflatable Modular System

Aquasol's I-Purge Inflatable Modular Bladder Systems provide an air-tight seal, enabling achievement of an oxidation-free weld and even penetration beads on all pipe joints.

The I-Purge Standard Modular System is comprised of two spark-resistant inflatable bladders connected by a high-heat bridge harness.

All I-Purge Systems are equipped with Quick Connect fittings which allow for rapid assembly (and disassembly) of the components (harness and bladder modules), which can be combined in many configuration for your specific needs.

All I-Purge systems include a Tri-Flow hose to maximize efficiency, enabling bladder inflation and quick flooding of the purge area with noble gas.

A patent-pending gas diffuser comes standard with every unit (except 2" and 3" sizes) to reduce turbulence and evenly distribute inert gas through the purge area.

I-Purge®**X** Expandable Modular System

The I-Purge**X** Expandable Modular System performs the same functions of the Standard I-Purge System with one notable difference, one size expands and contracts to fit multiple pipe sizes.

The I-Purge**X** Modular System is comprised of **two expandable,** spark-resistant inflatable bladders connected by a high-heat resistant bridge harness.

I-Purge**X** Modular System Sizes:

ITEM NO.	SIZE RANGE (English)	SIZE RANGE (Metric)
XABLD 2-3	2-3"	51-76 mm
XABLD 4-6	4-6"	102-152 mm
XABLD 8-12	8-12"	203-305 mm
XABLD 14-18	14-18"	356-457 mm
XABLD 20-26	20-26"	509-660 mm
XABLD 28-36	28-36"	711-914 mm
XABLD 38-48	38-48"	965-1219 mm

WARNING:

» I-Purge**X** is designed to effectively purge a specific range of pipe diameters and **should not be used in a pipe diameter other than recommended range**.

I-Purge Isolator® & I-Purge**X** Isolator® Single Purge Bladder and Pipe Plug

The I-Purge and I-Purge**X** Isolators can be used for a wide range of applications, including purging of valves or tanks, as well as non-purging applications. I-Purge Isolator is designed to function as a pipe plug for various tasks such as pipe system sealing for servicing, cleaning and inspection.

The I-Purge and I-Purge**X** Isolators are constructed of heavy duty materials designed to withstand the extreme conditions of the petrochemical, utility and construction industries.

I-Purge® & I-Purge®**X** Modular System Components

All I-Purge Systems are equipped with Quick Connect fittings which allow for rapid assembly (and disassembly) of the components (harness and bladder modules), which can be combined in many configurations for your specific needs.

The Inflatable Bladders consist of two main components:

» An inner heavy-duty polymeric inflatable bag

» An outer spark-resistant, durable covering which protects the bag from harsh elements in the environment, including heat and dirt.

The fabric covering on I-Purge**X** is flexible to allow the inflatable bladders to expand to fit several pipe diameters.

Inflatable Bladder Modules A & B

Standard tandem bladders consist of two sides, referred to as Module A and Module B:

» **Module A** is defined as the side with gas inputs/outputs.

» **Module B** is defined as the side which connects to the relief valve. This end is typically inserted into the pipe first. To identify the size of **Module B**, refer to the small tag sewn onto the pull loop.

One of the many benefits of the modular system is that **Modules A** and **B** do not have to be the same nominal pipe size to accommodate different applications such as valve welding, reducers, etc. For example, an 8" (203 mm) **Module A** may be connected to a 4" (102 mm) **Module B**.

I-Purge® & I-Purge®X Modular System Components

High-Heat Resistant Bridge Harnesses

The bridge harness is the connecting hose between the two inflatable bladders. It is comprised of a flexible braided fiberglass shielding over a high-heat resistant inner tube.

The central point of the bridge harness is marked with a Luminescent Indicator to easily align the center of the unit with the root gap. It is important to position the bladders equal distances from the weld joint to prevent over heating of one side, which could rupture or damage the bladder.

All I-Purge® bladders come complete with bridge harnesses of the following sizes:

SIZE	STANDARD HOSE LENGTH (English/ Metric)
2-8" (51-203 mm)	11" (279 mm)
10-12" (254-305 mm)	12" (305 mm)
14-18" (356-457 mm)	16" (406 mm)
20-24" (508-619 mm)	18" (457 mm)
26-36" (660-914 mm)	20" (509 mm)
38-44" (965-1118 mm)	36" (914 mm)
46-48" (1168-1219 mm)	42" (1067 mm)

To accommodate pre-heating and high-heat applications, extended-length harnesses offer flexibility, enabling the placement of the inflatable bladders further outside of the Heat Affected Zone (HAZ).

Extended-length harnesses are available in standard sizes: 24" (610 mm), 36" (914 mm), 48" (1219 mm), and 72" (1828 mm). Additional lengths are available upon request.

High-Heat Resistant Harness

I-Purge and I-Purge**X** sizes 36” and greater are equipped with a high flow harness to expedite inflation.

I-Purge® & I-Purge®**X** Modular System Components

Tri-Flow Tube

The Tri-Flow Tube feature of both I Purge and I Purge X allows for three separate flows of gas (two inputs and one output) within a single tube.

The **BLUE** purge hose provides inflation to the bladders and releases the inert gas into the weld zone through the relief valve until a tight seal is achieved.

The secondary optional **BLACK** hose allows purge gas to flow directly into the weld zone, enabling faster purge time. This provides even greater flexibility as any flow rate can be used.

The two purge connections, which are made via the **BLUE** and **BLACK** hoses located on the end of Module A, are equipped with 3/8" barbed fittings and can be removed if the 1/4" female NPT fittings are preferred. If a conversion from the standard 1/4" female NPT fitting is required, Aquasol has an adapter available to convert this thread to 1/4" BSPP. For more information, contact customer service for pricing and availability.

The third clear tube is known as the Exhaust Monitor Hose Connection, which serves as the outflow passageway, displacing oxygen exhaust.

This short, clear hose, equipped with a 3/16" barbed fitting connection, conveniently connects to an oxygen monitor for analysis within the weld zone. For optimal welding conditions, use Aquasol's PRO Ox®-100, which is perfectly suited to be used in combination with the I-Purge system.

Relief Valve

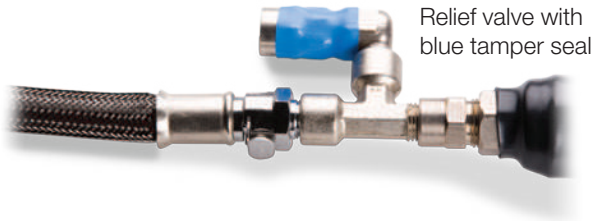
The relief valve is located on the **Module B** bladder near the branch tee which connects to the bridge harness. The relief valve is factory set to allow precise inert gas output, maintaining the optimum seal on the pipe wall, while preventing the risk of over inflation.

» I-Purge systems sizes 2" and 3" feature a low profile relief valve for easy insertion into small bore pipes.

Tamper Seal

Covering the relief valve and diffuser is a tamper seal to protect the factory settings.

WARNING: Under no circumstance should the tamper seal be broken, as this will void the product warranty.



Relief valve with blue tamper seal

Inert Gas Diffuser

As a standard accessory on I-Purge Modular Systems, a patent pending inert gas diffuser is installed on the pressure relief valve (PRV) with the primary function of reducing turbulence caused by the PRV.

The typical PRV design on other purge systems results in a turbulent gas flow into the weld zone. This can negatively impact both weld quality and weld consistency.

With the incorporation of a diffuser, the flow is dispersed in all directions after passing through a membrane designed to diffuse the inert gas flow from the PRV, therefore suppressing turbulence.

The diffuser is hermetically sealed to the PRV to ensure all inert gas emits from the same location.

US & Foreign Patent Pending

List of Parts

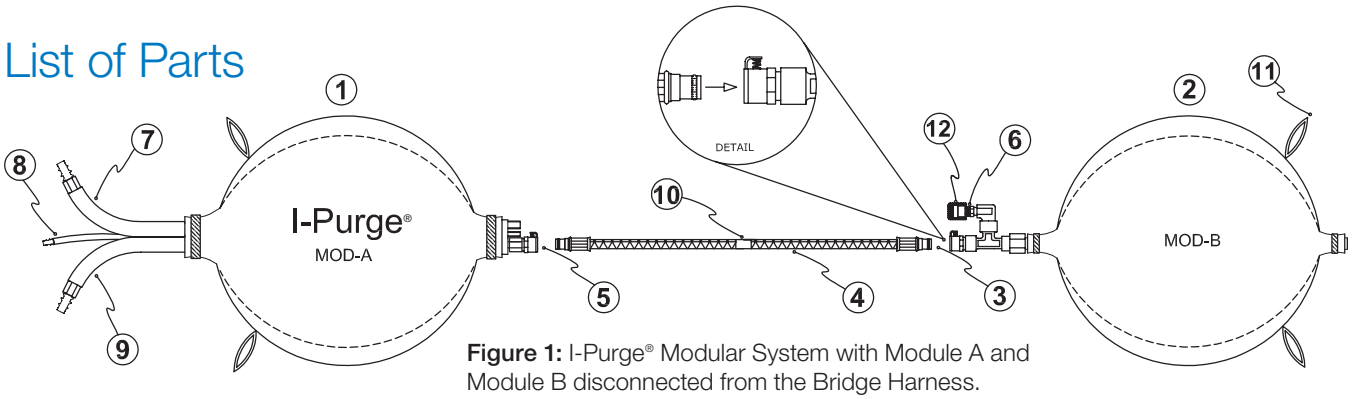


Figure 1: I-Purge® Modular System with Module A and Module B disconnected from the Bridge Harness.

1. **Module A:** Module A includes the gas inputs/outputs. Module A is printed with the bladder diameter size.
2. **Module B:** Module B includes the relief valve and diffuser. Module B is typically inserted into the pipe first. The bladder size is indicated by the tag sewn into the pull loop.
3. **Quick Connection (to Module B):** The quick connect fittings allow for rapid assembly (and disassembly) of the components, including various length harnesses and unique diameter bladders.
4. **Bridge Harness:** The bridge harness is the connecting hose between the two inflatable bladders, providing protection and reinforcement for the inner tube. It is comprised of a flexible braided fiberglass shielding over a high-heat resistant inner tube. The harnesses are available in a variety of extended lengths as an accessory to accommodate pre-heating applications.
5. **Quick Connection (to Module A):** The Quick-Connect fittings allow for rapid assembly (and disassembly) of the components, including various length harnesses and unique diameter bladders.
6. **Relief Valve:** The relief valve is factory set to allow precise inert gas output, maintaining the optimum seal on the pipe wall, while preventing the risk of over inflation.
   - » I-Purge systems 2" and 3", feature a low-profile relief valve for easy insertion into small bore pipes.
7. **BLACK Hose:** The secondary **BLACK** purge hose is designed to expedite purging by directly introducing inert gas into the weld zone.
8. **Exhaust Monitor Connection:** This short, clear hose, equipped with a 3/16" barbed fitting, conveniently connects to an oxygen monitor for analysis of the oxygen levels within the weld zone.
9. **BLUE Hose:** The **BLUE** purge hose provides inflation to the bladders and releases the inert gas into the weld zone through the relief valve and diffuser. Be sure to adjust the flow rate to the specifications listed in the I-Purge and I Purge X Recommended Gas Flow Rate charts on pages 18 and 19.
10. **Luminescent Indicator:** Located on the center of the bridge harness, allowing easy alignment of the unit with the root gap.
11. **Pull Loops:** Located on the ends of each module, the pull loops can be connected to a rope or chain to insert or remove the unit.
12. **Inert Gas Diffuser:** Attached to the relief valve is a gas diffuser to reduce turbulence and evenly distribute inert gas throughout the purge area.
    - » Covering the relief valve and diffuser is a blue tamper seal to protect the factory settings. **Do not remove this seal, as tampering with the relief valve will void the product warranty.**

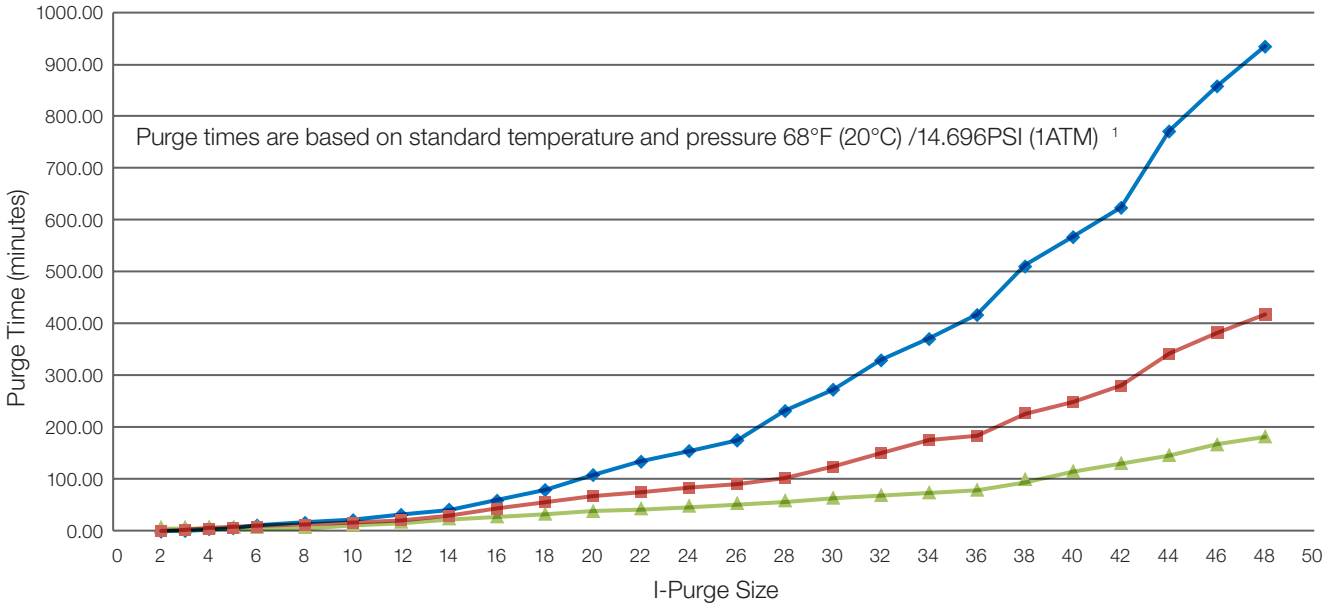
NOTE: Parts 2, 3, 6, and 11 are on the Isolator

Purge Times with I-Purge®

The time required to purge a pipe can vary significantly depending on the configuration of flow rates, hoses, regulators, and gas points analyzers used. For this reason, we have compiled the following data sets to demonstrate the expected purge times prior to performing a weld.

Below are three sets of data, (Cases 1, 2 and 3), each representing a typical configuration which may be used in a welding environment.

Chart 1
Expected Purge Times - CASES 1, 2, & 3



Sources: 1. Journal of Research of the National Institute of Standards and Technology (2003): 108.

Chart By: AG - R8.20.2012

CASE 1

Time required to purge to 100 ppm oxygen using just the inflation inert gas (**BLUE** hose) @ 20 SCFH. These figures are also indicative of a capped-off secondary purge hose (**BLACK**) and a free-flow exhaust.

CASE 2

Time required to purge to 100 ppm oxygen using both the inflation inert gas (**BLUE** hose) @ 25 SCFH and secondary input (**BLACK** hose) @ 20 SCFH.

CASE 3

Time required to purge to 100 ppm oxygen using both the inflation inert gas (**BLUE** hose) @ 25 SCFH and secondary input (**BLACK** hose) @ 50 SCFH.

This test was performed with a standard I-Purge system.

I-Purge® & I-Purge®**X** Assembly

Configuring the systems is simple and requires absolutely no tools.

To assemble or remove the modules from the main harness, simply push to disconnect, and then reconnect by sliding the male fitting into the coupling as demonstrated in the photos below.

I-Purge and I-Purge**X** sizes 36” and greater are equipped with a high flow harness to expedite inflation.

I-Purge® & I-Purge®X Set-Up & Installation

Pipe Preparation

Before the I-Purge System can be inserted into the pipe, it is critical to clean the pipe at least three linear feet (approx. 1 meter) or more depending on the length of the harness used, along the inside of each pipe, or the pipe fittings to be welded together. Cleaning the pipes is critical to achieving a pure weld and will prolong the life of the system.

Purge Gas Hose & Monitoring Hose Installation

1. Prior to use, determine the length of hose(s) required to make the necessary gas connections. Argon/inert gas supply hose is available through Aquasol; please contact Customer Service for price.

2. Connect both Module A and B to the bridge harness via the Quick Connect Fittings.

3. Connect the purge gas and exhaust monitor hoses before inserting into the pipe.

   IMPORTANT: The purge hoses should only be connected to an inert gas source. This gas will inflate the purge bladders and then purge the weld zone once the bladders are fully inflated.

   A. Connect the **BLUE** purge hose to a direct inert gas line using a 3/8" ID hose or 1/4" NPT connection.

   B. The use of the **BLACK** purge hose is optional. The **BLACK** purge hose can be used simultaneously with the blue purge hose to reduce purge time by evacuating oxygen more quickly. (See Chart 1 on page 13).

   To use the **BLACK** hose, remove the red plug and connect the hose to a direct inert gas line using another 3/8"ID hose and the supplied barbed fitting, or simply use a ¼" NPT connection.

   IMPORTANT: If you are not using the **BLACK** hose, this line should remain capped off to prevent oxygen backflow. Do not remove the red cap unless black hose is in use.

4. If desired, connect any gas monitoring equipment to the exhaust monitor connection. The standard connection on this hose is a 3/16" barbed fitting.

5. Attach a "pull-wire" or rope to the pull loops on either end of the system to aid in insertion and removal.

I-Purge® & I-Purge®X Set-Up & Installation

(Continued)

Preparation for Use

Once the I-Purge hoses are attached to the necessary gas lines, the system can be either pushed or pulled into place using the pull loops or “pull wires.”

Pipe Insertion

Insert the entire system and its connections into the pipe or pipe fitting. Push or pull the system as desired until it reaches the section of pipe to be welded. Using the Luminescent Indicator (reflective tape) on the bridge harness as a guide, align the indicator precisely in the center of the root gap. It is critical to position the bladders equidistant from the weld joint to prevent overheating of either bladder module.

Pull Loops inflated and deflated

Positioning of the I-Purge system is critical to achieving a proper seal on the pipe wall - **especially for larger units (14" and above)**.

Before installing the I-Purge system, connect pull-wires (or rope) to the pull loops at the end of the I-Purge modules.

It is important to keep a moderate tension (approx. 5 lbs) on the pull-wires to prevent sagging of the harness during installation and operation.

While inflating the system, check each module to ensure that it is inflating evenly. If the module looks as if it may be inflating “lopsided,” the operator can adjust this by changing the tension on the pull-wires accordingly.

CAUTION: Do not pull on the loops with too much force as you risk ripping the protective fabric.

I-Purge Isolator® & I-Purge**X** Isolator® Set-Up & Installation

Pipe Preparation

The following set-up instructions apply to any type of application in which I-Purge or I-Purge**X** Isolator is used.

Prior to inserting the system into the pipe, ensure that the pipe is free of any sharp edges, as well as any chemicals that may compromise the integrity of the unit. It is critical to clean the inside of the pipe or vessel to achieve a pure weld and prolong the life of the system.

Assembly and Installation

1. Prior to installation, ensure the module is securely connected to the **BLACK** hose before proceeding. This connection is made via a Quick Connect Fitting that can simply be snapped into place.
2. Connect the inflation gas line to the other end of the **BLACK** hose using a 3/8" ID hose or 1/4" NPT connection.
3. Connect a rope, chain, or wire to the pull loops on the ends of the bladder module. This will allow you to easily insert and remove the system.
4. Position the Isolator system in the pipe at the desired location.

CAUTION FOR WELDING APPLICATIONS:

» If the Isolator system is being used for a pipe purging application, be sure to use the appropriate inert gas as an inflation gas supply.

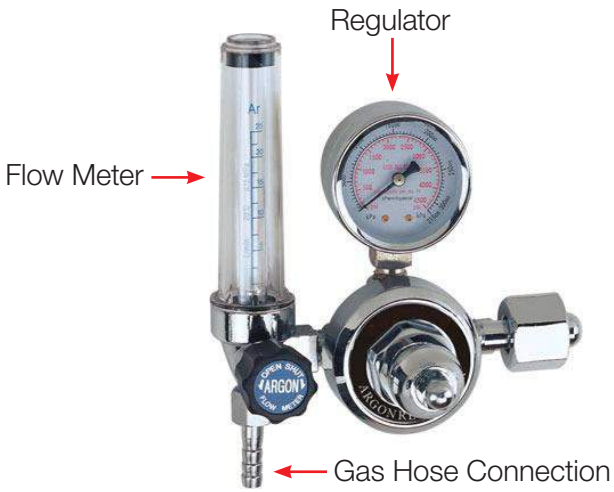
» Be certain to place the Isolator system outside of the Heat Affected Zone (HAZ) and apply tension to the pull loops or pull wire to prevent the hose from coming in contact with the hot pipe.

I-Purge® Standard System Operation

One of the most critical aspects for operating any I-Purge system is regulation of the flow rate. Use of a two-stage regulator is recommended to maintain a consistent flow rate and pressure supply to the unit.

Purge Gas Flow Rates **(Before Welding)**

IMPORTANT: When regulating flow rates, be sure to use the appropriate regulator and flow meter with a flow scale designed for the purge gas being input through the **BLUE (INFLATION) HOSE** to the unit.



Always make sure the regulator and flow meter are designed for the gas you are using. For instance, do not use an Argon Flow Meter with Nitrogen gas to avoid damage to the bladder system.

When you are ready to begin purging the weld zone, adjust the flow rate of the **BLUE** hose to the following specifications in the **I-Purge Recommended Gas Flow Rate Chart below:**

I-PURGE RECOMMENDED GAS FLOW RATE	
SIZE	**FLOW RATE**
2-34" (51-864 mm)	10-32 SCFH (5-15 LPM)
36-48" (915-1219 mm)	60 SCFH (28.5 LPM)

Purge Gas Flow Rates **(During Welding)**

NOTE: To increase purging time, the black purge hose can be connected to another inert gas supply. To quickly flood the weld zone, this gas supply can be regulated to much higher flow rates than the blue purge hose. It may be necessary to reduce this flow rate once the area is completely purged and welding has commenced.

NOTE: The flow rate for the BLUE (INFLATION) HOSE can be decreased if necessary to accommodate certain welding scenarios or if the flow is affecting the weld. However, it is recommended to follow these specifications to maintain an optimum seal on the pipe wall. Unlike the standard I-Purge®, I-Purge®**X** must run at a specific and constant flow rate to ensure a proper and secure seal on the pipe wall.

I-Purge®X System Operation

Purge Gas Flow Rate

When you are ready to begin purging the weld zone, adjust the flow rate of the **BLUE** hose to the following specifications in the **I-Purge X Recommended Gas Flow Rate Chart below:**

I-PURGEX RECOMMENDED GAS FLOW RATE	
SIZE	**FLOW RATE**
2-34" (51-864 mm)	30 SCFH (15 LPM)
38-48" (965-1219 mm)	60 SCFH (28.5 LPM)

- I-Purge**X** is designed to effectively purge a specific range of pipe diameters and should **NEVER** be used for smaller or larger diameter pipe applications.
- If an I-Purge**X** unit is operated in a diameter pipe other than the recommended range, future purging operations can be severely compromised and significantly less efficient. In addition, it is possible that the I-Purge**X** will fail due to excessive stress exposure to the inner and outer expandable materials of the bladders which will void the warranty.
- If used properly within the recommended diameter range, I-Purge**X** will continue to function efficiently for numerous purging operations.

I-Purge Isolator® & I-Purge**X** Isolator® System Operation

Inflation Flow Rates

I-Purge and I-Purge**X** Isolator require a constant pressurized gas source such as compressed air, nitrogen, CO2, or argon.

To optimize the sealing capacity of the I-Purge the following flow rates should be used with the **BLUE** hose:

I-PURGE & I-PURGEX ISOLATOR RECOMMENDED FLOW RATES	
I-PURGE ISOLATOR	**I-PURGE X ISOLATOR**
10-32 SCFH (5-15 LPM)	30 SCFH (15 LPM) ONLY

Deflation and Removal

When welding is complete, turn off the gas supply to the I-Purge® system. To reduce deflation time, it is advisable to empty the gas lines by disconnecting them from the main tank.

Use the pull loops or pull wires for easy removal.

CAUTION: Allow enough time for the pipe to sufficiently cool and deflate before withdrawing I-Purge from the pipe to ensure that the unit is not exposed to excessive heat.

Maintenance

To ensure consistently pure welds when using I-Purge®, keep the purge bladder off the ground and away from contaminants. It is important to keep I-Purge free of dirt and debris which may compromise the weld quality.

IMPORTANT: Keep I-Purge away from sharp objects, as contact may cause damage to the product

It is recommended that when not in use, I-Purge is stored in the provided carrying bag.

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
The I-Purge System seems to be taking too long to inflate	Flow rate into the **BLUE** purge hose may be set too low	Verify flow rate is set correctly according to the I-Purge and I-Purge**X Recommended Gas Flow Rate Charts** on pages 18 and 19
The I-Purge System isn't inflating or creating a tight seal	Inert gas connection may not be connected to the **BLUE** purge hose (or may only be connected to the **BLACK** purge hose)	Check to make sure there is a secure connection to the **BLUE** purge hose, the **BLACK** purge hose will not inflate the bladders
	Flow rate into the weld zone is too low	Verify the flow rate for the **BLUE** hose is set correctly according to the I-Purge and I-Purge**X Recommended Gas Flow Rate Charts** on pages 18 and 19
	Over inflation may have occurred possibly causing the inner bag to burst	Relief valve may not have been set correctly, or may have been tampered with. The flow rate may have exceeded the maximum tolerance; contact Aquasol for assistance.
It seems to be taking too long to purge the pipe (**before welding**)	Low or no flow through the **BLACK** purge hose	Confirm that flow through the **BLACK** purge hose is set to desired flow rate
	Modules not positioned correctly	If possible, look through the pipe to visually determine whether there is a tight seal on the inner pipe wall, if not, reposition
The flow from the I-Purge System is interfering with the welding process (i.e. during the welding process, excessive gas flow from the root gap is creating impurities in weld).	The flow rate which is keeping the bags inflated may be too high Flow from the **BLACK** purge hose is too high	Verify the flow gas rate is set correctly according to the I-Purge and I-Purge**X Recommended Gas Flow Rate Charts** on pages 18 and 19

Troubleshooting Guide

I-Purge® & I-Purge®**X** (Continued)

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Once welding begins, the level of oxygen begins to rise	Flow rate into the weld zone is too low	Verify the flow rate for the **BLUE** hose is set correctly according to the I-Purge and I-Purge**X** **Recommended Gas Flow Rate Charts** on pages 18 and 19
	Backflow into weld zone through **BLACK** (direct purge) hose	Ensure that the red plug is installed on the **BLACK** purge hose, to prevent back flow
The I-Purge System is becoming exceedingly rigid	Relief valve setting may be incorrect	Test unit externally from pipe, hold your hand over the diffuser once the bladder has fully inflated. If there is little to no flow, contact Aquasol. **NOTE: Take extreme caution when inflating the bladders externally from pipe**
	Flow rate into the **BLUE** purge hose is too high	Verify the flow rate for the **BLUE** hose is set correctly according to the I-Purge and I-Purge**X** **Recommended Gas Flow Rate Charts** on pages 18 and 19

Troubleshooting Guide

I-Purge Isolator® & I-Purge**X** Isolator®

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
The I-Purge Isolator seems to be taking too long to inflate	Flow rate into the **BLACK** purge hose may be set too low	Verify flow rate is set correctly according to the I-Purge and I-Purge**X** Isolator **Recommended Gas Flow Rate Charts** on page 19
The I-Purge Isolator isn't inflating	Over inflation may have occurred possibly causing the inner bag to burst	Relief valve may not have been set correctly, or may have been tampered with - check tamper seal. The flow rate may have exceeded the maximum tolerance; contact Aquasol for assistance.
The I-Purge Isolator is becoming exceedingly rigid	Relief valve setting may be incorrect	Test unit externally from pipe, hold your hand over the diffuser once the bladder has fully inflated – If there is little to no flow, contact Aquasol **NOTE: Take extreme caution when inflating the bladders externally from pipe**
	Flow rate into the **BLACK** purge hose is too high	Verify the flow rate for the **BLUE** hose is set correctly according to the I-Purge and I-Purge**X** Isolator **Recommended Gas Flow Rate Charts** on page 19

Technical Assistance

Contact us if you have any questions or require assistance with your I-Purge Modular System at:

Aquasol Corporation
Attn: Customer Service Department
80 Thompson Street
N. Tonawanda, NY 14120 USA

Toll Free: 1.800.564.WELD (9353)
Phone: 716.564.8888
Fax: 716.564.8889

Email: info@aquasolcorporation.com
Visit us at www.aquasolwelding.com

FAQ – Frequently Asked Questions

I-Purge®

Q: Can I use higher flow rates on the secondary (**BLACK**) purge hose than recommended?

A: You may use as high of a flow rate as you feel comfortable, although as welding begins, you will likely need to decrease this flow dramatically.

Q: How high of a temperature can I-Purge withstand?

A: The outer covering on the inflatable bags is the only component which should come into direct contact with the pipe. This material is infused with spark resistant elements which prevent it from catching fire when exposed to sparks and other exceedingly hot objects. The material itself can withstand temperatures as high as 400°F (205°C). It is advisable not to exceed a temperature of 250°F (120°C) for proper operation of the entire system.

I-Purge can accommodate higher temperatures (such as those in pre-heating welding) applications by attaching an extended length bridge harness, purchased separately through Aquasol.

Q: Can I-Purge be used in pre-heated pipe?

A: Yes. For pre-heating and high-heat applications, use a harness extension (purchased separately from Aquasol) to place the I-Purge bladders farther outside of the heat-affected zone (HAZ).

Q: How many times can I-Purge be used?

A: If used properly within the parameters established in this Operation Manual, I-Purge can be reused again and again for numerous welds. However, even though I-Purge is robustly built to withstand a great deal of wear and tear, this product is still susceptible to fatigue problems after frequent use and/or exposure to damaging elements such as extreme heat, extreme cold, and debris.

FAQ – Frequently Asked Questions

I-Purge® (Continued)

Q: How will I know if the bladders have been overinflated?

A: If you believe the bladders have been overinflated during operation, terminate gas flow immediately. When the bladders no longer hold air to any extent after an inner bladder burst, they may have been overinflated. This can be prevented by following the flow rates listed in this manual.

NOTE: Aquasol does not warrant any over-inflation system failures. Please review the Warranty and System Operation sections.

Q: Do I have to connect an oxygen monitor to the exhaust on the I-Purge?

A: It is not imperative for an oxygen monitor to be connected to the exhaust monitoring hose on I-Purge. Oxygen content can be monitored through the root gap.

Q: Can I-Purge be used in various schedule pipes for the same nominal diameter?

A: I-Purge is designed to fit any schedule pipe for each nominal pipe diameter from schedule 5 to schedule 160. Due to its unique modular design, I-Purge can also accommodate differing pipe diameters, single-sided purging requirements and pre-heated pipes by connecting an extended harness.

For additional questions, send your inquiry to:
info@aquasolcorporation.com or call **716.564.8888**
Within the US: Toll Free **800.564.9353**

FAQ – Frequently Asked Questions

I-Purge®**X**

Q: Can I exceed the recommended expansion size?

A: No. As stated in the warranty statement in the beginning of the manual, the unit will not function properly following an overinflation. Never exceed the maximum range labeled on the I-Purge**X**.

Q: Can I-Purge**X** and I-Purge (standard) components be interchanged?

A: No. Since the calibration for the pressure settings on I-Purge**X** differ from those for the standard I-Purge you should not interchange parts between models.

Q: How high of a temperature can I-Purge**X** withstand?

A: Similar to the standard I-Purge, I-Purge**X** features a spark resistant fabric which protects the inner bladder and prevents damage from occurring. It is advisable not to exceed a temperature of 250°F (120°C) for proper operation of the entire system.

I-Purge Isolator® & I-Purge**X** Isolator®

Q: Does I-Purge Isolator have to be used for pipe purging?

A: The I-Purge Isolator is designed for pipe purging before/during welding, but it has the flexibility to be used as a pipe plug in other applications such as construction, plumbing, sewage, etc.

Q: Why does the Isolator deflate if the gas supply is turned off?

A: I-Purge Isolators are equipped with a pressure relief valve to prevent over-inflation of the unit. The gas will continue to exit the inflatable bladder through the relief valve, deflating the unit. Therefore, a constant supply of gas must be maintained to keep a tight seal on the pipe wall (Refer to Isolator – System Operation on page 19).

For additional questions, send your inquiry to:
info@aquasolcorporation.com or call **716.564.8888**
Within the US: Toll Free **800.564.9353**

1. Ensure I-Purge is fully assembled (i.e. modules are securely connected to harness).
2. If necessary, connect rope, chain, or wire to the pull loops on the ends of the bladder modules. This will allow you to easily insert and remove the system.
3. Connect inert gas lines to the **BLUE** and **BLACK** hoses.
   BLUE gas hose is required to inflate the purge bladders
   BLACK gas hose is optional to expedite the purging process
4. Position the purge unit in the pipe to align the luminescent indicator with the root gap.
5. Turn the gas supply on to inflate the bladders and purge the weld zone. Set the flow rate correctly according to the I-Purge **Recommended Gas Flow Rate Charts** on page 18
6. Once a tight seal has been achieved, commence welding. Set the flow rate correctly according to the I-Purge **Recommended Gas Flow Rate Charts** on page 18.
   The flow rate for the **BLUE** inflation hose can be decreased if necessary to accommodate certain welding scenarios or if the flow is affecting the weld.
7. For proper deflation, turn off the gas supply to deflate the bladders. Once the heat zone has sufficiently cooled and the bladders have fully deflated, remove I-Purge from the pipe. Be sure to disconnect all gas lines and monitoring equipment.
8. Clean I-Purge and store in the provided carrying bag when it is not in use.

Quick Instruction Guide

I-Purge®**X**

1. Ensure I-Purge**X** is fully assembled (i.e. modules are securely connected to harness).
2. If necessary, connect rope, chain, or wire to the pull loops on the ends of the bladder modules. This will allow you to easily insert and remove the system.
3. Connect inert gas lines to the blue and black hoses.
4. **BLUE** gas hose is required to inflate the purge bladders.
5. **BLACK** gas hose is optional to expedite the purging process
6. Position the purge unit in the pipe using the luminescent indicator as a guide to center the system across the root gap.
7. Turn the **BLUE** gas supply on to inflate the bladders and purge the weld zone.
8. Always maintain a consistent flow rate during inflation, purging, and welding.
9. **BLUE** gas hose should transfer inert gas at the correct rate according to the **I-PurgeX Recommended Gas Flow Rate Chart** on page 19.
10. Once a tight seal has been achieved, commence welding.
11. After the weld is complete, turn off the gas supply to deflate the bladders. Once the heat zone has sufficiently cooled, remove I-Purge**X** from the pipe. Be sure to disconnect all gas lines and monitoring equipment.
12. Clean I-Purge**X** and store in the provided carrying bag when it is not in use.

1. Assemble the isolator system by connecting the **BLACK** hose to the Inflatable Bladder Module. Ensure the Module is securely connected to the hose harness via the Quick Connect Fittings.
2. Connect the inflation gas line to the end of the **BLACK** hose using a 3/8" ID hose or 1/4" NPT connection.

   NOTE: If the isolator is being used for a purging application, be sure to use the appropriate inert gas as an inflation gas supply.
3. If necessary, connect rope, chain, or wire to the pull loops on the ends of the bladder module. This will allow you to easily insert and remove the system.
4. Turn the gas supply on to inflate the bladder module to create a hermetic seal within the pipe.

   Flow Rates for Operation: See **I-Purge** and **I-PurgeX Isolator Recommended Gas Flow Rate Chart** on page 19.
5. After the operation is complete, turn off the gas supply to deflate the module and remove from the pipe. Be sure to disconnect all gas lines and monitoring equipment.
6. Clean the isolator system and store in the provided carrying bag when it is not in use.

Parts & Accessories List

I-Purge® Standard Configuration

(Sold as a Complete System)

ITEM #	ENGLISH	METRIC	DESCRIPTION
ABLD 2	2"	51 mm	2" I-Purge® Double Purge Bag System
ABLD 3	3"	76 mm	3" I-Purge® Double Purge Bag System
ABLD 4	4"	102 mm	4" I-Purge® Double Purge Bag System
ABLD 5	5"	127 mm	5" I-Purge® Double Purge Bag System
ABLD 6	6"	152 mm	6" I-Purge® Double Purge Bag System
ABLD 8	8"	203 mm	8" I-Purge® Double Purge Bag System
ABLD 10	10"	254 mm	10" I-Purge® Double Purge Bag System
ABLD 12	12"	304 mm	12" I-Purge® Double Purge Bag System
ABLD 14	14"	355 mm	14" I-Purge® Double Purge Bag System
ABLD 16	16"	406 mm	16" I-Purge® Double Purge Bag System
ABLD 18	18"	457 mm	18" I-Purge® Double Purge Bag System
ABLD 20	20"	508 mm	20" I-Purge® Double Purge Bag System
ABLD 22	22"	558 mm	22" I-Purge® Double Purge Bag System
ABLD 24	24"	609 mm	24" I-Purge® Double Purge Bag System
ABLD 26	26"	660 mm	26" I-Purge® Double Purge Bag System
ABLD 28	28"	711 mm	28" I-Purge® Double Purge Bag System
ABLD 30	30"	762 mm	30" I-Purge® Double Purge Bag System
ABLD 32	32"	812 mm	32" I-Purge® Double Purge Bag System
ABLD 34	34"	863 mm	34" I-Purge® Double Purge Bag System
ABLD 36	36"	914 mm	36" I-Purge® Double Purge Bag System
ABLD 38	38"	965 mm	38" I-Purge® Double Purge Bag System
ABLD 40	40"	1016 mm	40" I-Purge® Double Purge Bag System
ABLD 42	42"	1066 mm	42" I-Purge® Double Purge Bag System
ABLD 44	44"	1117 mm	44" I-Purge® Double Purge Bag System
ABLD 46	46"	1168 mm	46" I-Purge® Double Purge Bag System
ABLD 48	48"	1219 mm	48" I-Purge® Double Purge Bag System

Parts & Accessories List

I-Purge® Modular Configuration

(Sold as Separte Parts)

MODULE A ITEM #	MODULE B ITEM #	ENGLISH	METRIC	DESCRIPTION
ABLD 2 MOD A	ABLD 2 MOD B	2"	51 mm	2" I-Purge® Single Purge Bag
ABLD 3 MOD A	ABLD 3 MOD B	3"	76 mm	3" I-Purge® Single Purge Bag
ABLD 4 MOD A	ABLD 4 MOD B	4"	102 mm	4" I-Purge® Single Purge Bag
ABLD 5 MOD A	ABLD 5 MOD B	5"	127 mm	5" I-Purge® Single Purge Bag
ABLD 6 MOD A	ABLD 6 MOD B	6"	152 mm	6" I-Purge® Single Purge Bag
ABLD 8 MOD A	ABLD 8 MOD B	8"	203 mm	8" I-Purge® Single Purge Bag
ABLD 10 MOD A	ABLD 10 MOD B	10"	254 mm	10" I-Purge® Single Purge Bag
ABLD 12 MOD A	ABLD 12 MOD B	12"	304 mm	12" I-Purge® Single Purge Bag
ABLD 14 MOD A	ABLD 14 MOD B	14"	355 mm	14" I-Purge® Single Purge Bag
ABLD 16 MOD A	ABLD 16 MOD B	16"	406 mm	16" I-Purge® Single Purge Bag
ABLD 18 MOD A	ABLD 18 MOD B	18"	457 mm	18" I-Purge® Single Purge Bag
ABLD 20 MOD A	ABLD 20 MOD B	20"	508 mm	20" I-Purge® Single Purge Bag
ABLD 22 MOD A	ABLD 22 MOD B	22"	558 mm	22" I-Purge® Single Purge Bag
ABLD 24 MOD A	ABLD 24 MOD B	24"	609 mm	24" I-Purge® Single Purge Bag
ABLD 26 MOD A	ABLD 26 MOD B	26"	660 mm	26" I-Purge® Single Purge Bag
ABLD 28 MOD A	ABLD 28 MOD B	28"	711 mm	28" I-Purge® Single Purge Bag
ABLD 30 MOD A	ABLD 30 MOD B	30"	762 mm	30" I-Purge® Single Purge Bag
ABLD 32 MOD A	ABLD 32 MOD B	32"	812 mm	32" I-Purge® Single Purge Bag
ABLD 34 MOD A	ABLD 34 MOD B	34"	863 mm	34" I-Purge® Single Purge Bag
ABLD 36 MOD A	ABLD 36 MOD B	36"	914 mm	36" I-Purge® Single Purge Bag
ABLD 38 MOD A	ABLD 38 MOD B	38"	965 mm	38" I-Purge® Single Purge Bag
ABLD 40 MOD A	ABLD 40 MOD B	40"	1016 mm	40" I-Purge® Single Purge Bag
ABLD 42 MOD A	ABLD 42 MOD B	42"	1066 mm	42" I-Purge® Single Purge Bag
ABLD 44 MOD A	ABLD 44 MOD B	44"	1117 mm	44" I-Purge® Single Purge Bag
ABLD 46 MOD A	ABLD 46 MOD B	46"	1168 mm	46" I-Purge® Single Purge Bag
ABLD 48 MOD A	ABLD 48 MOD B	48"	1219 mm	48" I-Purge® Single Purge Bag

Parts & Accessories List

Accessory Components

ITEM #	ENGLISH	METRIC	DESCRIPTION
ABLD-ELH-24	24"	609 mm	24" (2') Extended Length High-Heat Harness
ABLD-ELH-36	36"	914 mm	36" (3') Extended Length High-Heat Harness
ABLD-ELH-48	48"	1219 mm	48" (4') Extended Length High-Heat Harness
ABLD-ELH-72	72"	1228 mm	72" (6') Extended Length High-Heat Harness
ABLD-ELH-CUSTOM	Any size	Any size	Additional High-Heat Harness
ABLD-CNADP	N/A	N/A	1/4" Female MPT to 1/4" Female BSPP Conversion
ISO-ADAPTER-HARNESS	10'	3.05m	Isolator Adapter Harness

*Standard Hoses are not sold separately.

I-Purge®**X** Standard Configuration
(Sold as a Complete System)

ITEM #	ENGLISH	METRIC	DESCRIPTION
XABLD 2-3	2-3"	51-76 mm	2-3" I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 4-6	4-6"	102-152 mm	4-6" I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 8-12	8-12"	203-305 mm	8-12" I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 14-18	14-18"	356-457 mm	14-18" I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 20-26	20-26"	509-660 mm	20-26" I-I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 28-36	28-36"	711-914 mm	28-36" I-I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness
XABLD 38-48	38-48"	965-1219 mm	38-48" I-Purge®**X** Expandable Double Purge Bag System with High-Heat Harness

Parts & Accessories List

I-Purge®**X** Standard Configuration
(Sold as Separate Parts)

MODULE A ITEM #	MODULE B ITEM #	ENGLISH	METRIC	DESCRIPTION
XABLD 2-3 MOD A	XABLD 2-3 MOD B	2-3"	51-76 mm	2-3" I-Purge®**X** Expandable Single Purge Bag
XABLD 4-6 MOD A	XABLD 4-6 MOD B	4-6"	102-152 mm	4-6" I-Purge®**X** Expandable Single Purge Bag
XABLD 8-12 MOD A	XABLD 8-12 MOD B	8-12"	203-305 mm	8-12" I-Purge®**X** Expandable Single Purge Bag
XABLD 14-18 MOD A	XABLD 14-18 MOD B	14-18"	356-457 mm	14-18" I-Purge®**X** Expandable Single Purge Bag
XABLD 20-26 MOD A	XABLD 20-26 MOD B	20-26"	509-660 mm	20-26" I-Purge®**X** Expandable Single Purge Bag
XABLD 28-36 MOD A	XABLD 28-36 MOD B	28-36"	711-914 mm	28-36" I-Purge®**X** Expandable Single Purge Bag
XABLD 38-48 MOD A	XABLD 38-48 MOD B	38-48"	965-1219 mm	38-48" I-Purge®**X** Expandable Single Purge Bag

I-Purge®**X** Accessory Components
(Sold as Separate Parts)

ITEM #	ENGLISH	METRIC	DESCRIPTION
ABLD-ELH-24	24"	609 mm	24" (2') Extended-Length High-Heat Harness
ABLD-ELH-36	36"	914 mm	36" (3') Extended-Length High-Heat Harness
ABLD-ELH-48	48"	1219 mm	48" (4') Extended-Length High-Heat Harness
ABLD-ELH-72	72"	1828 mm	72" (6') Extended-Length High-Heat Harness
ABLD-ELH-CUSTOM	Any size	Any size	Additional High-Heat Harness (sold in linear feet)
ABLD-CNADP	N/A	N/A	1/4" Female MPT to 1/4" Female BSPP Conversion

*Standard Hoses are not sold separately.

Parts & Accessories List

I-Purge Isolator®

ITEM #	ENGLISH	METRIC	DESCRIPTION
ISO 2	2"	51 mm	2" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 3	3"	76 mm	3" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 4	4"	102 mm	4" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 5	5"	127 mm	5" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 6	6"	152 mm	6" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 8	8"	203 mm	8" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 10	10"	254 mm	10" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 12	12"	304 mm	12" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 14	14"	355 mm	14" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 16	16"	406 mm	16" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 18	18"	457 mm	18" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 20	20"	508 mm	20" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 22	22"	558 mm	22" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 24	24"	609 mm	24" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 26	26"	660 mm	26" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 28	28"	711 mm	28" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 30	30"	762 mm	30" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fittinge
ISO 32	32"	812 mm	32" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fittinge

Parts & Accessories List

I-Purge Isolator® (Continued)

ITEM #	ENGLISH	METRIC	DESCRIPTION
ISO 34	34"	863 mm	34" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 36	36"	914 mm	36" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 38	38"	965 mm	38" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 40	40"	1016 mm	40" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 42	42"	1066 mm	42" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 44	44”	1117 mm	44" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 46	46"	1168 mm	46" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
ISO 48	48"	1219 mm	48" I-Purge Isolator® One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting

Parts & Accessories List

I-Purge**X** Isolator®

ITEM #	ENGLISH	METRIC	DESCRIPTION
XISO 2-3	2-3"	51-76 mm	2-3" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 4-6	4-6"	102-152 mm	4-6" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 8-12	8-12"	203-305 mm	8-12" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 14-18	14-18"	356-457 mm	14-18" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 20-26	20-26"	509-660 mm	20-26" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 28-36	28-36"	711-914 mm	28-36" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting
XISO 38-48	38-48"	965-1219 mm	38-48" I-Purge®**X** Expandable One-Sided Plug with 10' Hose and 1/4" FNPT Barb Fitting

80 Thompson Street
N. Tonawanda, NY 14120 USA

Toll Free: 1.800.564.WELD (9353)
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www.aquasolcorporation.com

IP.M4.1015.R6

Aquasol
CORPORATION

MADE IN THE USA

PRO OX®-100 Kit

PROGRAMMABLE DIGITAL OXYGEN MONITOR

STATE-OF-THE-ART TECHNOLOGY FOR PRECISE OXYGEN MONITORING

100 PPM

CE APPROVED

KIT CONTENTS

- PRO OX®-100 Monitor and Sensor
- Polycarbonate Carrying Case
- Neoprene Extension Tubing (5 ft. or 1.5 m) with Quick Connect Fittings
- Stainless Steel Probe
  - » Slender 0.08" (2 mm) Diameter
- Rechargeable Battery & Charger
- USB Cable
- Support Stand
- Phillips Head Screwdriver
- Quick Instruction Card

Aquasol CORPORATION

aquasol**welding**.com

PRO OX®-100 Kit

PROGRAMMABLE DIGITAL OXYGEN MONITOR

MONITOR FEATURES

- 0.01% Oxygen Resolution
- Automatic Self Calibration
- Internal Pump
- Data Logging Capability: Accumulates Up to 50 Data Points
- Data Output to Computer for Recording History
- Audiovisual Alarm
- Rechargeable 9V Battery
- One Year Warranty on Unit and Sensor
- Illuminated Display
- Designed for Universal Voltage
- Programmable in Multiple Languages

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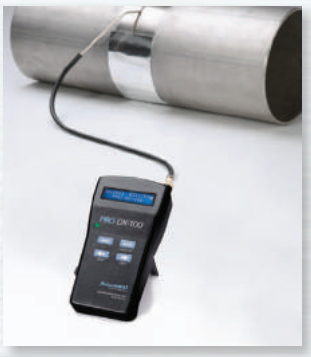
PRO OX®-100 Kit

PROGRAMMABLE DIGITAL OXYGEN MONITOR

Audiovisual Alarm



Oxygen contamination is one of the most common reasons for substandard welds.

Eliminate guesswork by setting the audiovisual alarm to desired O_2 PPM value. The unit will produce an intermittent beep sound simultaneously as a green light flashes. The operator is alerted and can continue evacuating oxygen, reset the alarm or commence welding.

Rechargable 9V Battery & Charger

Designed For Universal Voltage

The PRO OX®-100 is compatible with different voltage and frequency specifications from around the world. It can operate on 100VAC/60Hz, 120VAC/60Hz and 220VAC/50Hz configurations.

- Can be Used Over & Over
- Environmentally Friendly
- Save on Purchases

Self-Calibrating and Certified

- The PRO OX®-100 Oxygen Monitor is factory calibrated and certified, accompanied by a dated certificate of authentication

CE Designation

- The PRO OX®-100 is in compliance with EC Directives

Languages

Besides English, the PRO OX®-100 is programmable in three popular languages:

- German
- Portuguese
- Spanish

Data Logging Capabilities

Increase Accuracy With Software Reporting

- With the PRO OX®-100 you will be able to create permanent records of real time data (at 15 second intervals) of oxygen levels for critical welding operations

Easy-to-Use Conversion Software

- The PRO OX®-100 software enables the user to capture and export 50 data points in just clicks to Microsoft® Excel and plain text format

Convenient and Quick Data Offload

- The PRO OX®-100 offloads data to a PC via a convenient USB interface at a high-speed, ensuring data integrity

Features Two Sampling Modes

SPOT:

- Use this mode if the purging process requires more than 20 minutes to help save battery and time
- Use this mode for simultaneous weld applications

CONTINUOUS:

- Use this mode when permanent records are required (in conjunction with data logging)
- Use this mode when PPM is near required level

Aquasol CORPORATION

HANDHELD OXYGEN MONITOR PRO OX®-100 SPECIFICATIONS

Measurement Range:	0.00-21.0% Oxygen concentration by volume
Calibration:	20.9% (Oxygen concentration in air)
Calibration Gas:	Ambient Air
Display Resolution:	0.00-24.99% (2 decimal places LCD)
Accuracy:	@ 99.995% Ar +/- 0.01%
Response Time:	T_{90}<15 seconds
Warm Up Time:	Negligible
Humidity:	0-95% non-condensing
Operating Temperature:	32˚-122˚F (0˚-50˚C)
Storage Temperature:	37.4˚-68˚F (3˚-20˚C)
Sample Flow:	1.0 LPM maximum
Sample Pressure:	10.0 PSI (pounds-force per square inch) maximum
Power:	One 9V NiMH Cell Battery
Battery Life:	Up to 2 hours when operating in continuous sampling mode.
Sensor Type:	Electrochemical Oxygen Sensor
Sensor Life:	12 months
Recommended Calibration Period:	Weekly, dependent upon use
PC Connection:	USB Type B

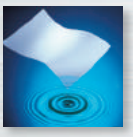
SPECIFICATIONS

PRO OX®-100 Kit Types and Sizes

ITEM NO.	DESCRIPTION	DIMENSIONS		WEIGHT	
		ENGLISH (IN)	METRIC (MM)	ENGLISH	METRIC
P-OX KIT	PRO OX-100 Oxygen Monitor & Accessories Kit	11 x 9 x 4	279 x 227 x 102	4.00 lb	182 g
P-OX KIT Euro	PRO OX-100 Oxygen Monitor & Accessories Kit with European Charger	11 x 9 x 4	279 x 227 x 102	4.00 lb	182 g
P-OX Sensor	PRO OX-100 Oxygen Sensor	1 x 1	21 x 20	0.03 lb	16 g
P-OX Batt	PRO OX-100 9V NiMH Battery	2 x 1 x 1	48 x 26 x 17	0.12 lb	54 g
P-OX Charger/US	PRO OX-100 12V NiMH Battery Charger with US Type Plug	3 x 2 x 1	8 x 60 x 25	0.10 lb	59 g
P-OX Charger/EU	PRO OX-100 12V NiMH Battery Charger with European Type Plug	3 x 2 x 1	8 x 60 x 25	0.10 lb	59 g
P-OX USB	PRO OX-100 USB Cable (72" or 1.8 m)	4 x 4 x 1	102 x 102 x 25	0.11 lb	50 g

For additional product information, quotations and ordering, please contact:

Aquasol Corporation



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