

Disinfectant Boost System DBS-125 Owner's Manual



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IMPORTANT

**YOU MUST COMPLETELY
READ AND FULLY
UNDERSTAND THESE
INSTRUCTIONS BEFORE
INSTALLING, OPERATING,
OR SERVICING THIS UNIT.**

Be sure you have read all installation, operation, maintenance and safety instructions before you install, service or begin to operate this unit.

Accidents occur every year because of careless use of industrial equipment. You can avoid hazards by following these safety instructions, and applying some ordinary common sense when operating or servicing this unit.

Keep in mind that **full operator attention and alertness** are required when operating or servicing this unit.

USE COMMON SENSE!! Most accidents can be avoided by using **common sense and concentration** on the job being done.

WARNINGS / PRECAUTIONS:

Please check all hose clamp connections to make sure clamps and fittings are tight. Even though all fittings are factory tightened and checked, clamps may have settled into the hose material during transportation and may require an additional tightening before the first start-up of the unit. Periodic checking should also be considered as preventative measures for the safety of the operators.



IMPORTANT!!!

PLEASE FOLLOW ALL LOCAL AND STATE LAWS IN REGARDS TO SAFETY OF HANDLING AND TRANSPORTING NaOCl. PLEASE USE NECESSARY PPE WHEN HANDLING NaOCl OR USING THIS DISINFECTANT BOOST SYSTEM. REFER TO THE PROPER MATERIAL SAFETY DATA SHEETS FOR ADDITIONAL PRECAUTIONS AND SAFETY MEASURES.

Features

DBS-125

The Ixom Watercare, Inc. Disinfection Boosting System, DBS-125, is specifically designed to pump the full range of concentrations of Sodium Hypochlorite. The design enables this system to be portable, operated by a wide range of portable air compressors, and allows the user to dose, rinse and air purge at multiple locations with a single unit.

COMPACT, CONTAINED, AND PORTABLE DESIGN

User friendly design featuring a disinfectant holding tank and fresh water rinse tank. Secondary self containment is integrated into the frame structural design. The unit is portable and easily fits in small to full sized pick-up boxes.

SELF-PRIMING CONFIGURATION

Pump location allows flooded suction from both disinfectant and rinse water holding reservoirs. Pump is located inside containment enclosure for minimized user exposure and safe operation.

CORROSION RESISTANT COMPONENTS

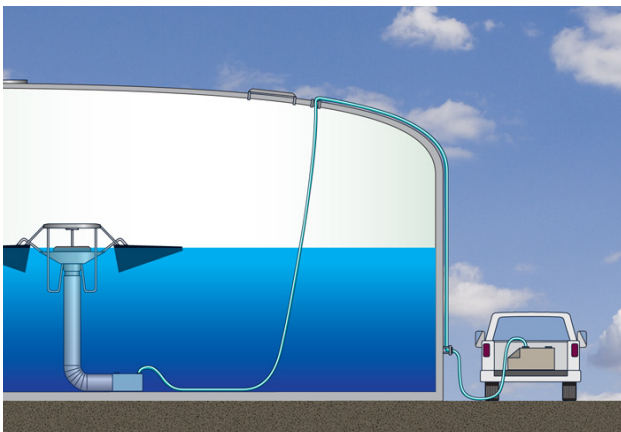
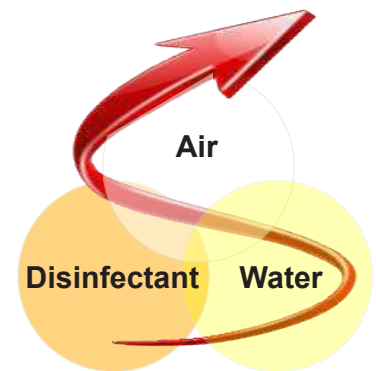
All wetted material components are of chemical compatibility with Sodium Hypochlorite. Stainless steel hardware and containment on non-wetted parts are utilized for atmospheric corrosion resistance.

FLOW AND LIQUID LEVEL INDICATION

Visible liquid level of chemical holding tank, with level indicators precise to fractions of a gallon.

THREE STAGE CHEMICAL BOOSTING SYSTEM

Easily dose disinfectant with the high performance Air-Operated Double Diaphragm (**AODD**) pump discharging at a rate of 0.5gpm to 4.0gpm at heads up to 125psi or +200 ft. Easy liquid selection valve operation to switch from pumping chemical to pumping rinse water. Three-way main control valve allows user to switch from pumping disinfectant to pumping rinse water and to purge injection lines dry using the same air compressor operating the **AODD** pump.



BENEFITS

Frequent boosting with small doses of chlorine is far less costly than having a major problem occur in a tank. This portable disinfectant boosting unit allows you to dose smaller amounts of chlorine more frequently allowing your tanks to be maintained within your desired chlorine residual levels. With frequent monitoring and this portable boosting unit you can give your customers quality water they deserve.

The DBS-125 is designed to operate with an air compressor capable of producing 4cfm at 60psi. An air compressor is required to operate this system and is not included with the purchase of this product.

Connecting the DBS-125 to your potable water tank:

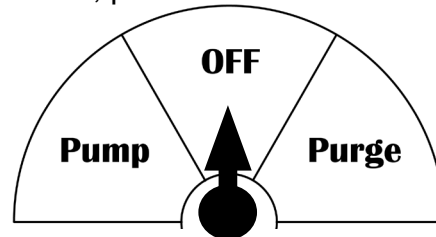
Be sure to check and secure all connections before starting the disinfectant boost unit. This unit comes equipped with a 30 ft discharge hose to connect the disinfectant boost unit to the injection port of your potable water tank. The injection hose is equipped with Banjo® quick-connect fittings to easily adapt to the disinfectant boost unit and to SolarBee circulation equipment chemical injection lines.

Locate the discharge port on the side of the control panel of the disinfectant boost unit. Remove the protective dust cap and set aside. Connect the mating end of the 30 ft discharge hose to the discharge port engaging both cam levers to make a secure connection.

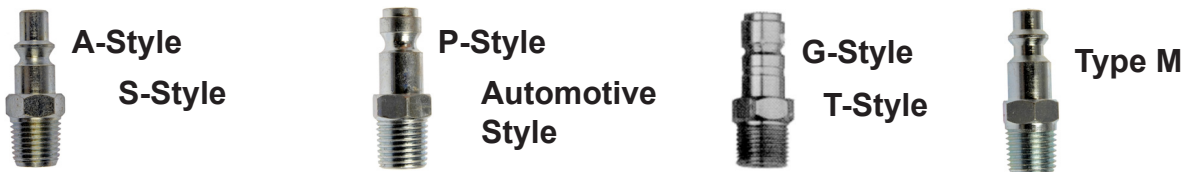
Connect the opposite end of the 30 ft discharge hose to your potable water tanks injection port, also engaging both cam levers of the quick connect fittings for a secure connection. Open any valves in line with the injection port of the potable water tank, if applicable.

Connecting the air compressor to operate the DBS-125:

Before connecting the air supply to the disinfectant boost unit, please be sure that the main control valve is turned to the “OFF” position.



Once the main control valve is turned to the “OFF” position, the air supply can now be connected to the “Compressor Quick Connect” fitting (Milton Type M). There are different styles of air fittings, so you may be required to change out this fitting if it is not compatible with your type of air compressor quick coupler. Air supply quick connection fittings can be purchase at most automotive or hardware stores. This fitting can easily be changed out to accommodate your air compressor.



Once the air supply is connected to the disinfectant boost unit, adjust the air pressure using the “Pressure regulator”. Set the air pressure to 75psi. **Never allow air pressure to exceed 125psi. This may damage certain components of the disinfectant boost system.**

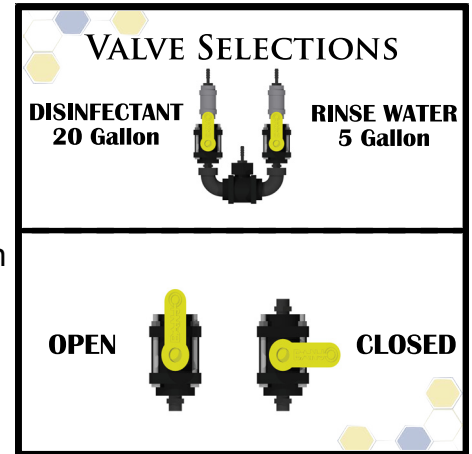


Selecting the desired liquid for discharge:

Now that you have all connections made to safely dose your potable water tank, you will have to select which holding tank to pump from depending on the desired liquid you would like to pump. Using the below diagram, turn only the corresponding valve to the open position to pump your desired liquid.

The “DISINFECTANT” valve will allow dosing from the 20 gallon storage tank as labeled on the disinfectant boost units tank cover. The “RINSE WATER” valve will allow dosing from the 5 gallon storage tank as labeled on the disinfectant boost units tank cover.

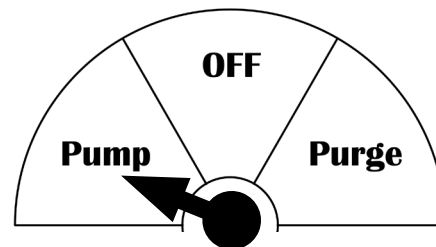
To start dosing your tank, first make note of the liquid level “site tube” gauge on the side of the “DISINFECTANT” 20 gallon holding tank. Turn the “DISINFECTANT” valve to the OPEN position.



Dosing your potable water tank:

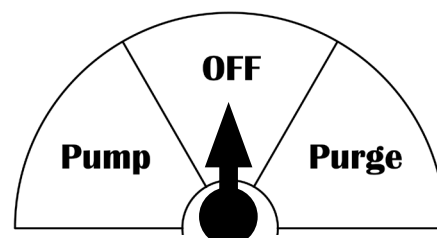
Turn the main control valve to the “PUMP” position. This will allow air to flow from the air compressor to the **AODD** pump to start pumping from the selected holding tank. Use the “Flow Regulator” needle valve to adjust the rate of which you would like to dose. Dosing should occur between 0.5gpm and no greater than 4.0gpm.

DISINFECTANT



Knowing the amount of disinfectant you would like to boost, use the site tube gauge to dose the desired amount of disinfectant. Turn the main control valve to the “OFF” position once you have dosed the desired amount of disinfectant. CLOSE the “Disinfectant Valve” and OPEN the “RINSE WATER” valve. Turn the main control valve back to the “PUMP ON” position to pump a small amount of rinse water, approximately 1 gallon, from the 5 gallon holding tank. The rinse water will push the remaining disinfectant through the injection line at the desired injection rate between 0.5gpm and no greater than 4.0gpm.

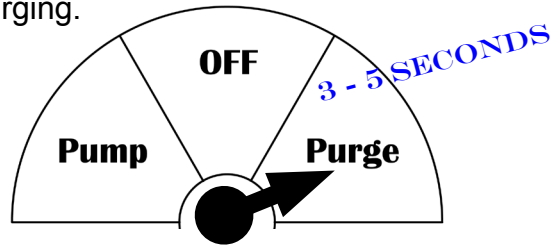
WATER



Purging the injection lines:

Now that the desired amount of disinfectant is completely injected, *slowly* turn the main control valve to the “PURGE” position. This will use the air from the air compressor to purge the injection line free of the remaining water and residual disinfectant in the injection line. Turn the main control valve to the “OFF” position after approx. 3 to 5 seconds of purging.

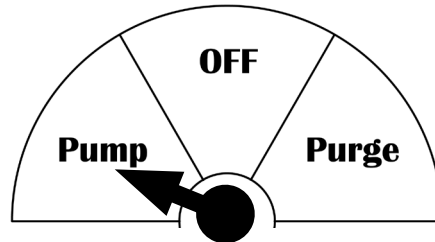
WATER



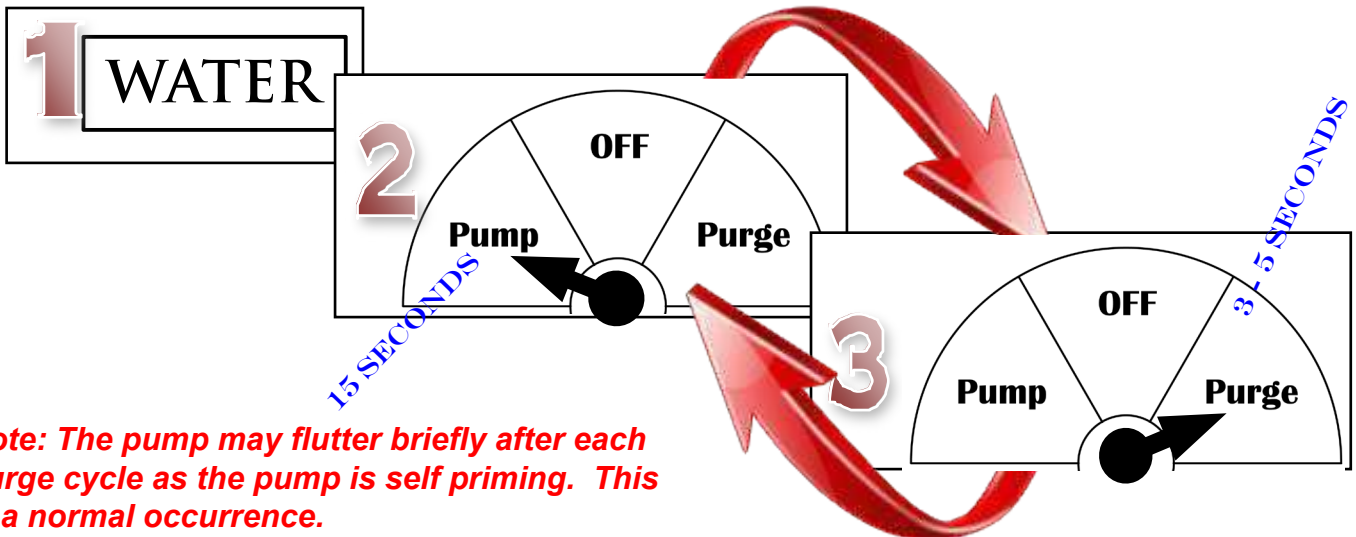
Flushing the injection lines:

In order to keep your injection lines free from disinfectant scaling, it is necessary to flush the lines clean of any disinfectant residual. With the “Rinse Water Valve” in the OPEN position, repeat the dosing instructions by turning the main control valve to the “PUMP” position. Dose only a small amount of rinse water, approximately 0.125 gallons, from the 5 gallon holding tank.

WATER

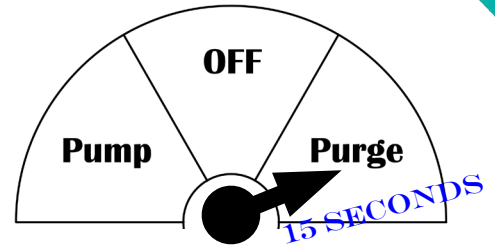


Once a small amount of rinse water is pumped into the injection lines, turn the main control valve to the “PURGE” position for approximately 3 to 5 seconds. This will push the rinse water quickly thru the injection lines washing the line of the remaining disinfectant residual. Repeat these flushing steps 3 to 4 times, pumping approximately 0.125 gallons of rinse water and purging for 3 to 5 seconds.

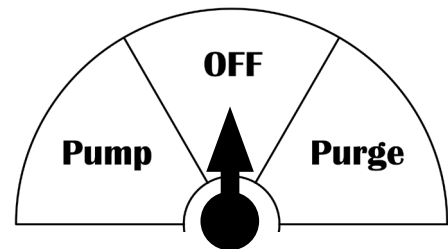
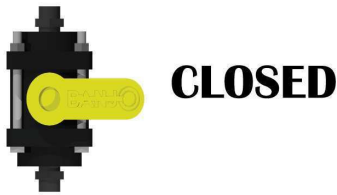


Note: The pump may flutter briefly after each purge cycle as the pump is self priming. This is a normal occurrence.

Once you feel the injection lines are thoroughly rinsed, complete a final purge cycle. Purge the injection lines a final time for approximately 15 seconds. This will remove most of the moisture from the injection lines to prevent damage to the injection lines due to freezing or scaling.

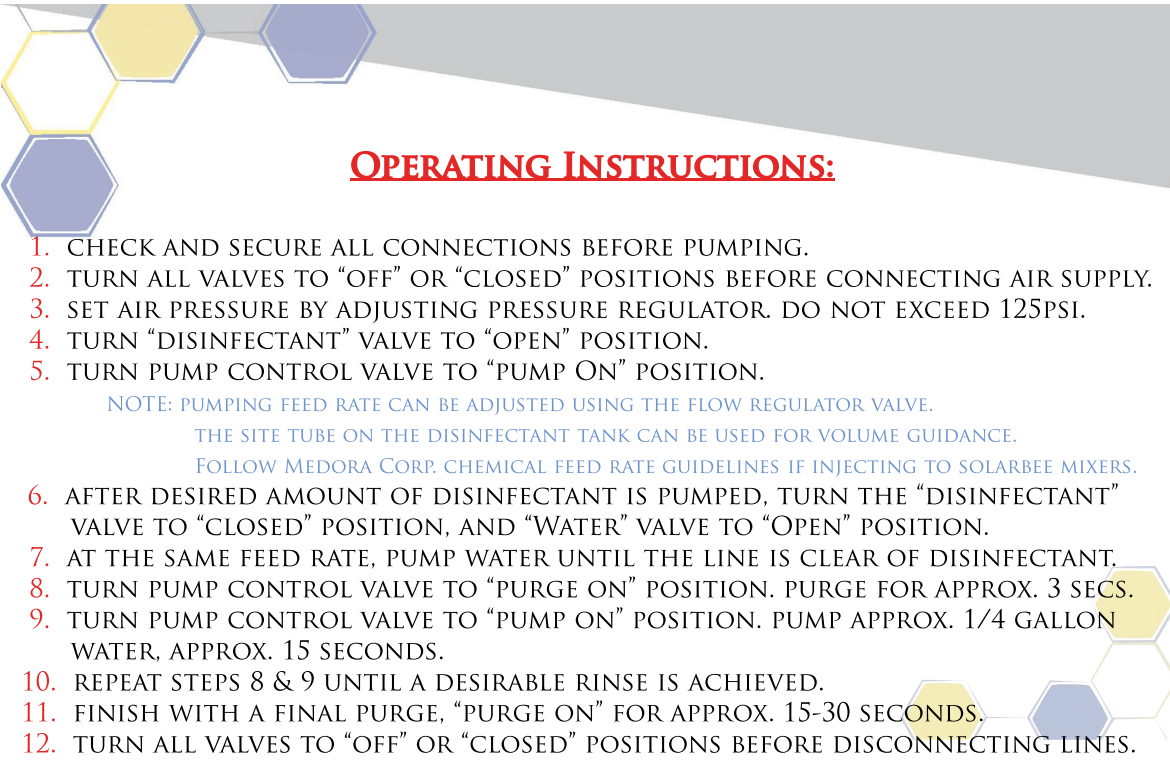


You have now successfully dosed your potable water tank using the Ixom Watercare, Inc. DSB-125 system. Make sure the main control valve and both liquid selection valves are all turned to the “OFF” or “Closed” positions before disconnecting the 30 ft discharge line from the potable water tank or from the disinfectant boost unit.



Once the disinfectant boost unit is turned “OFF”, you may turn off and disconnect the air compressor from the unit.

The below basic operating instructions decal is located below the control panel of the product for your convenience.



OPERATING INSTRUCTIONS:

1. CHECK AND SECURE ALL CONNECTIONS BEFORE PUMPING.
2. TURN ALL VALVES TO “OFF” OR “CLOSED” POSITIONS BEFORE CONNECTING AIR SUPPLY.
3. SET AIR PRESSURE BY ADJUSTING PRESSURE REGULATOR. DO NOT EXCEED 125PSI.
4. TURN “DISINFECTANT” VALVE TO “OPEN” POSITION.
5. TURN PUMP CONTROL VALVE TO “PUMP ON” POSITION.

NOTE: PUMPING FEED RATE CAN BE ADJUSTED USING THE FLOW REGULATOR VALVE.
 THE SITE TUBE ON THE DISINFECTANT TANK CAN BE USED FOR VOLUME GUIDANCE.
 FOLLOW MEDORA CORP. CHEMICAL FEED RATE GUIDELINES IF INJECTING TO SOLARBEE MIXERS.

6. AFTER DESIRED AMOUNT OF DISINFECTANT IS PUMPED, TURN THE “DISINFECTANT” VALVE TO “CLOSED” POSITION, AND “WATER” VALVE TO “OPEN” POSITION.
7. AT THE SAME FEED RATE, PUMP WATER UNTIL THE LINE IS CLEAR OF DISINFECTANT.
8. TURN PUMP CONTROL VALVE TO “PURGE ON” POSITION. PURGE FOR APPROX. 3 SECS.
9. TURN PUMP CONTROL VALVE TO “PUMP ON” POSITION. PUMP APPROX. 1/4 GALLON WATER, APPROX. 15 SECONDS.
10. REPEAT STEPS 8 & 9 UNTIL A DESIRABLE RINSE IS ACHIEVED.
11. FINISH WITH A FINAL PURGE, “PURGE ON” FOR APPROX. 15-30 SECONDS.
12. TURN ALL VALVES TO “OFF” OR “CLOSED” POSITIONS BEFORE DISCONNECTING LINES.

Summary Specifications



DBS-125

Technology Description:	Safe, durable chemical transfer system to boost disinfectant in potable water reservoirs.
AODD Pump:	Air Operated Double-Diaphragm pump. Capacity of 0 to 4 GPM discharge. Displacement per stroke of 0.1 gallons. Heads up to 125 psi or 288 ft of water.
Air Compressor: (not included)	Portable (ie. gas engine) oil-less air compressor required to operate system. Air compressor not included. 4cfm at 60psi required. Compressor should be capable of 125 psi if desired to run the pump at maximum pressure rating.
Skid/Base:	316 stainless steel construction. Provides secondary containment.
Chemical Hose:	30 feet of 3/8" flexible Teflon chemical hose jacketed with stainless steel braid sheathing. 250 psi max pressure.
Chemical Compatibility	Constructed of Polypropylene, CPVP, Teflon, and Viton. All materials compatible with 12.5% sodium hypochlorite, maximum temperature of 100°F and 30% calcium hypochlorite (liquid form only).
Holding Tank:	20 gallon capacity disinfectant holding tank, and 5 gallon capacity rinse water tank. High density linear polyethylene (HDLPE) material construction.
Dimensions	20"W x 24"H x 56"L, 150 lbs (dry weight), 350 lbs (full capacity wet weight)
Warranty:	Limited 1 year parts and labor warranty.

Identify all possible hazards. Determine what safeguards are needed and implement them. **Only you, the user,** understand your product and system characteristics fully. **The ultimate responsibility for safety is with you. Your safety ultimately rests in your hands.** Do your part and you will enjoy safe, trouble free operation for years to come.

IXOM WATERCARE, INC.'S LIMITED REPLACEMENT WARRANTY:

All new and factory-refurbished Ixom Watercare, Inc. equipment is warranted to be free of defective parts, materials, and workmanship for a period of 1 years from the date of installation or delivery. This warranty is valid only for use of the Ixom Watercare, Inc. equipment in accordance with the owner's manual and any initial and ongoing factory recommendations. This warranty is limited to the repair or replacement of defective components only except for the first 1 years the warranty includes both parts and labor. In lieu of sending a factory service crew to the site for minor repairs, the seller may choose to send the needed parts to the owner postage paid and pay the owner a reasonable labor allowance to install the parts. There are no other warranties of any type, express or implied, and there is no liability for consequential damages of any type.

Terms applicable to all equipment. This Limited Replacement Warranty is subject to the terms of Ixom's General Terms and Conditions of Sale. In the event of any inconsistency between the terms of this Limited Replacement Warranty and Ixom's General Terms and Conditions of Sale, the terms of this Limited Replacement Warranty shall prevail to the extent of that inconsistency.

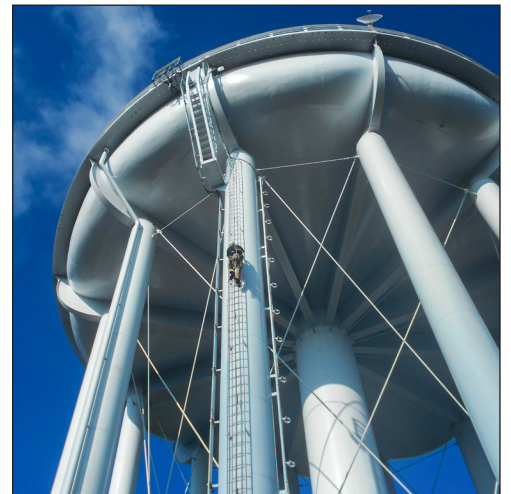
IXOM

WATERCARE

Nationwide Installation & Service

EVERYONE DESERVES GREAT CUSTOMER SUPPORT

Ixom Watercare earns customer trust with unparalleled service start to finish. Every department in Ixom is dedicated to the support of our Customers and the improvement of water quality. Complete life cycle support is much, much more than a returned phone call or an email. It centers around direct access and communication to those who can help when help is needed from the beginning of a project throughout the life of the equipment.



ABOUT IXOM

Ixom combines innovative water quality solutions with top notch manufacturing and nationwide in-field service capabilities to create trusted, full circle support our Customers depend on.

We design and manufacture many trusted brands including GridBee®, SolarBee®, MIEX®, and ResidualHQ® for use across the water quality spectrum. This includes solutions for Water Treatment, Distribution Treatment, Wastewater Treatment and Lakes & Source Water Reservoirs.

Ixom has thousands of installations and is an industry-leader solving water quality problems across the United States, Canada and the world.

Contact us today to discuss your water quality and service needs.

ixomwatercare.com
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