

# BRISTOW

## Water Cooler

### **Product Description:**

ALL NEW.....Bristow Water Cooler

--Are you tired of rinsing with warm water or the hassle of freezers and ice chests just to get cool water?

--Are you tired of your misters or swamp coolers not cooling your barn because of high water temperature?

How would you like to have 34 degree water right from the hose in your barn? Yes that's right, not cool water but .....COLD WATER!!!!

Bristow Water Cooler is the answer to your problems!! This system will cool water to 34 degrees or 20 degrees below the source water temperature be supplied to the system. In most cases the Bristow will supply 39 degree water 24/7. Here's how it works.....the system cools water to 34 degrees, when the holding tank reaches 39 degrees the Bristow automatically cycles and cools the water back to 34 degrees. Now this is based on 4 gallons per minute but as a FYI, most water nozzles for a hose end is rated around 2.5 gallons per minute

This is an easy to install system. The cooling unit is positioned outside much like an A/C unit, a holding tank positioned on the inside of the barn close to where you will be using. Then two quick coupler hoses attach between the two units. Supply power to the unit, preferably with a cutoff switch box, provide water supply and your ready for some COLD water!!!

This easy to install system is a must in every show barn. Bristow Water Cooler will provide your show barn with cold water 24/7.



**What does this unit do?** This unit is designed to lower your incoming water temperature 20 degrees at a rate of 4 Gallons Per Minute with continuous use.

**Will the unit lower my water temperature more than 20 degrees?** Yes, it will lower the water temperature to 34 degrees, but if your incoming water temperature is over 55 degrees, it will not maintain 34 degrees of **continuous use** but will maintain a 20 degree drop in water temperature, which in most cases is 39 degrees because that is where the unit is set to recycle.

**Can we make the water temperature colder than 34 degrees?** No. Anything colder than 34 degrees and the unit will start to freeze up and the safety switch will shut the unit down.

**What is the best way to get the coldest water?** If you have a water 55 degrees or less coming in, this unit will perform exceptionally well. You will have consistent 34 degree water coming out of your spray hose.

**Can I cool my barn with this unit?** Yes. If you are using misters or port-a-cools, this unit can be connected to these units to help cool your facility. One thing to keep in mind though, is that we are supplying 34 degree water to the hose connection. If you do not have enough water flow through the hose from our system to your misters, the hose will heat up due to ambient conditions. You may need to talk to a plumber or your HVAC technician and install a **simple** recirculation system so that cold water is supplied to your misters at all times. If you have any questions on this you can feel free to call our tech number and they would be glad to help you out.

**Will this unit cause me to lose pressure at my spray nozzle?** The unit itself will not cause any pressure loss to your hose, but you will need to follow the guidelines on hose sizing and length. The unit is restricted to 4 gallons per minute for the spray hose. If you use a spray hose with a diameter **over** ½", you will experience a pressure drop, but that is due to the hose size, not the unit.

**Does it matter how long my spray hose is?** Yes. We recommend a Spray hose of 25' long, with ½" inside diameter. You may use a longer spray hose but you may lose water temperature due to the ambient conditions. It is the same thing as leaving a 100' hose out in the sun in your yard. It will take a while to remove all of the heat from the hose.

**Does it matter what kind of spray nozzle I use on the spray hose?** No, as long as you have one. Most spray nozzles are restricted to below 4 Gallons Per Minute. If you have an extremely high flow nozzle, it is not recommended that you use it with this system. Most spray nozzles are rated around 2.5 gallons per minute.

**Is there a type of Spray Nozzle that is recommended for use this system?** We recommend a "Fire Hose" style nozzle with a "Pistol Grip" and oversize "Bar Style" shutoff, made of plastic. The reason for

this is because the water going through the hose is so cold, you will not be able to hold it in one hand for 15 minutes before it becomes uncomfortable, and this style has an adjustable nozzle that you can dial in to penetrate the hair and get the water down to the skin.

**Does it matter how long the hose is going to the tank from the water supply faucet at my facility?**

No, it makes no difference how long that hose is. What does matter is that the supply hose should be protected from direct sunlight or high heat areas so that the water inside the supply hose does not heat up any more than it is before it enters the tank to make the system more efficient.

**Where should I locate this system in my facility?** We recommend that the storage tank be located in your wash rack in a location that will allow a 25' hose to be adequate for rinsing activities. The condensing unit should be located outside the building, in a location that allows the 12' hoses that are supplied with the unit to be long enough to connect the two pieces of equipment. This may vary and may need to be customized to fit your situation.

**Can I extend the length of the hoses that go between the two units?** We have supplied two-1" ID, 200 PSI hoses with Cam Lock Quick Connects. The system was designed for the head pressure restriction of this length of hose. We do not recommend increasing the length of the hose. If you do increase the hose length, we cannot guarantee the unit performance. If this occurs then we may have to make some adjustments to fit your situation.

**What happens if the hoses are not hooked up correctly?** The system will still function, but it will not perform at its peak performance. No damage will occur to the system.

**Can I shorten the length of the hoses that go between the two units?** Again, the unit was designed with two-12' long hoses. We do not recommend shortening the hoses due to the fact that it changes the head pressure restrictions on the pump.

**Should the hoses supplied with the unit be protected from direct sunlight?** Yes. For best unit performance, the supplied 1" ID hoses should be inside the conditioned building as much as possible. We also recommend that you insulate the hoses if they are in direct sunlight or located outside. The unit will work properly without these hoses being insulated, but it will save you energy if these hoses are protected.

**Is this system difficult to install?** No. We recommend that you use a licensed electrician to install a 40 amp double pole blade style disconnect and connect the power to the unit. The rest of the installation can be done by anyone who can follow the installation instructions and can connect a water hose.

**Does this system use a lot of electricity?** No. This system does not use a lot of electricity, even if it was used continuously. There are a couple of different tips on installation that will help to lower energy

consumption. Protect the system from direct sunlight, insulate any water lines installed outside of the building, shut the system off when not in use and keep the condenser clean. It is extremely helpful to have a blade style disconnect installed near the tank in the wash rack that you can turn on and off. If you turn the unit on 15 minutes prior to rinse activities, and shut it off after rinsing is complete, the system will only be operating 15 minutes more than you are rinsing. The cost of operation is very minimal.

**Does it matter if the storage tank gets wet while rinsing?** No. There are no electrical components in the tank. All controls and electrical parts are installed in the outside unit.

**Will the system freeze?** Yes. If left outside when the ambient temperature is below 35 degrees, the system will freeze. It must be winterized. The units water hoses need to be disconnected and the whole unit blown out and drained to protect from freezing. We recommend the Condensing unit be disconnected and stored in a location that will not freeze during winter months. If you properly winterize the unit, it can be left outside and will not freeze. This is an important piece of equipment that will provide years of use if properly maintained.

**Who can service this equipment?** Any licensed and insured HVAC contractor can service this equipment. Keep in mind that they have never seen a piece of equipment like this, and it will take them a few minutes to get an overview. Once they get a grasp of how it operates, they will be able to service it just like any other refrigeration system. If you have a HVAC contractor that you use on a regular basis, have them give us a call, even before purchasing the system, and we will explain it to them.

**What type of Preventative Maintenance should this unit receive?** This system is just like any other piece of HVAC equipment and does not require any special type of Preventative Maintenance. That doesn't mean it shouldn't receive at least an annual Preventative Maintenance, just that there is nothing special that needs to be done that is out of the ordinary with a typical HVAC system. Keep the condenser clean with regular rinses of the outdoor unit for maximum performance.

**Why does the fan on the condenser not start right away?** The system has what is called a "low Ambient Kit" installed which only allows the fan to operate when it is needed. This helps to lower the overall operational cost of the system and allows the unit to operate properly in lower outside air temperatures.

**The system is shut off, but I still hear a slight "Hum" at the outdoor unit. What is that noise?** There is a circulation pump in the outdoor unit that constantly runs when power is applied. This ensures that the entire storage tank is kept consistently cold. Whenever there is power to the system, the water is circulating.

**What type of Refrigerant does this system use?** This system utilizes R-407C Refrigerant.

**How large of a breaker should I have installed for this system?** This system will require a 230 volt, 30 amp circuit for over-current protection.

**What type of quality control is in place to ensure that the system I purchase operates properly?**

Every unit has been air tested to check for leaks. The storage tanks are air tested a minimum of 4 times. The refrigeration circuit is pulled down to 250 microns prior to the system being charged. Every single system is run-tested prior to leaving the factory to ensure that it is operating properly. The system also comes with a full one year warranty on all parts and service.

**Can this unit be used for other things?** Yes. It was designed to be used for rinse applications, but it can be used for other applications that require a constant supply of cold water. We have other products in the research and development stages that you may be interested in that will be coming out in the future. Examples of other applications that this type of system can be used for are Therapeutic rinses for animal Physical Therapy, cooling bath water for race animals and cooling Hog Barn water for drinking and Mistors (or it can be used to fill your water balloons so that you win the annual water balloon fight at you next family function!!!). If you have an application in mind, please let us know and we can design one for you that suits your needs.

Cost for the complete Bristow Water Cooler..... \$5,500

For ordering contact:



**Dave Guyer** - General Manager  
12251 E. 625<sup>th</sup> Ave.  
Robinson, IL 62454

off.: 618.546.5035  
mob.: 812.243.1676  
guyercattleco@gmail.com  
[www.naturalsolutionsforlivestock.com](http://www.naturalsolutionsforlivestock.com)

Also be sure to check out our full line of livestock product used on the majority of the champions nationwide.

