REALICE®

Swedish floodwater technology: The #1 energy-saving equipment for ice rinks.

Partner of

IIHF INTERNATIONAL ICE HOCKEY FEDERATION

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watreco®

REALice – for Building and Maintaining Great Ice
The REALice System consists of two parts that work together, brilliantly. The **REALice r1x handheld unit** has two interchangeable spray nozzles to build great ice from scratch and make on-spot ice repairs once the ice is in. The REALice wall unit comes in four different sizes, supplied based on the static pressure, flow and pipe sizes at the filling station. The **REALice r4x**, **r6x**, **r10x** and **r12x** are easily integrated to the existing piping to treat the water at the filling station for the ice resurfacing machine.

Colder Floodwater
With REALice, colder floodwater can be used to maintain the ice. Very cold rinks may need to use tempered REALice-treated floodwater to prevent the ice from freezing from the top down, and to ensure the rug on the back of the ice resurfacing machine does not freeze to the ice.

Warmer Ice
With REALice, the brine temperature must be raised by 2-5°F (1-3°C) to maintain the same great quality ice you had with hot water floods. REALice-treated water freezes so much faster and the brine temps need to be raised to prevent the ice from being brittle and creating too much snow.

Reduces Water Consumption
Using REALice-treated water to maintain the ice may result in a reduction in water consumption. REALice, at higher brine settings, produces fine snow which may require less floodwater to maintain the ice.

Improves Ice Quality
Ice made from REALice-treated water is denser, clearer, faster and more durable.

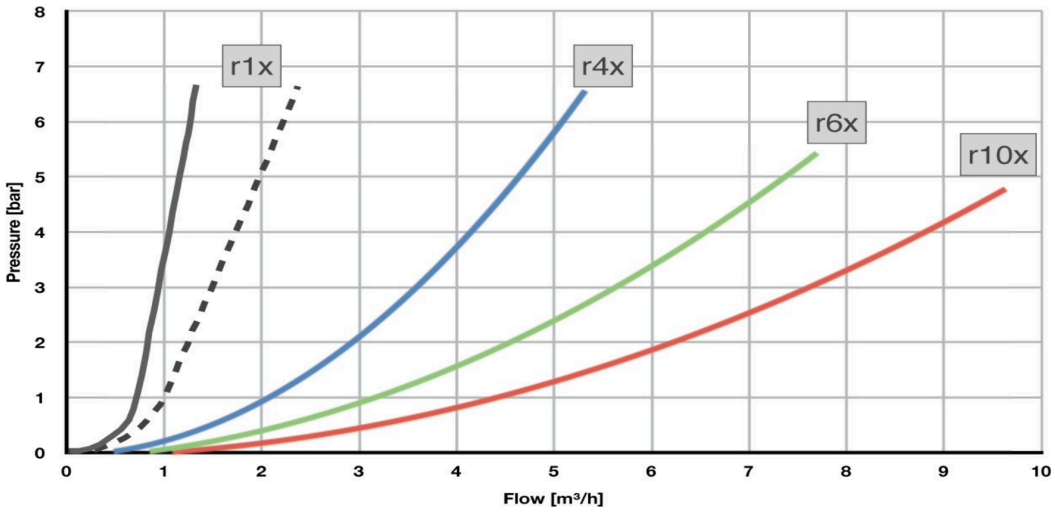
Reduces Compressor Demand
Using colder floodwater means the refrigeration demand is less. And, because the REALice-treated water freezes faster, the ice temperature will need to be reset higher and that's where the big savings are. This reduces run time, extends the lifecycle of the compressors, saving energy – and money – year after year, after year.

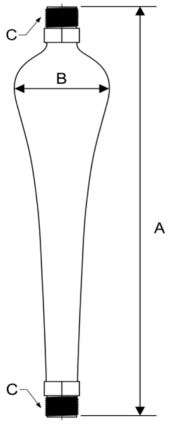
Lower Viscosity
By removing micro air bubbles from the water, REALice lowers the ***viscosity*** of the water. This results in water that sets up better, easily filling gouges and scars in the ice.

Reduces Limescale Deposits
REALice changes the chemical balance of hard water in such a way that lime scaling is reduced. Equipment lasts longer and does not require maintenance as often and your ice will be clearer than it ever was before.

For more information: **https://realice.ca**

Technical Specifications





	r1x	r4x	r6x	r10x	r12x
Maximum pressure at 68°F/20°C	232 PSI/16 bar (PN16)	232 PSI/16 bar (PN16)	232 PSI/16 bar (PN16)	232 PSI/16 bar (PN16)	232 PSI/16 bar (PN16)
Normal flow at 45-75 psi/3-5 bar	1-2 m³/hour 264-528 gallons/hour	4 m³/hour 1,057 gallons/hour	6 m³/hour 1,585 gallons/hour	10 m³/hour 2,642 gallons/hour	12 m³/hour 3,170 gallons/hour
Recommended operational temperature	64°F/18°C	64°F/18°C	64°F/18°C	64°F/18°C	64°F/18°C
Length (A)	340 mm / 13.39”	360 mm / 14.17”	460 mm / 18.11”	550 mm / 21.65”	700 mm / 27.56”
Diameter (B)	106 mm / 4.17”	82 mm / 3.23”	96 mm / 3.78”	120 mm / 4.73”	170 mm / 6.70”
Weight	0.97 kg / 2.14 lb	1.27 kg / 2.80 lb	1.43 kg / 3.15 lb	1.89 kg / 4.17 lb	2.4 kg / 5.29 lb
Connect to: (C)	ISO 228-G1”	ISO 228-G1”	ISO 228-G1”	ISO 228-G1¼”	ISO 228-G2”
Pressure meter	No	Yes	Yes	Yes	Yes

REALice r1x – Handheld Unit

The REALice r1x handheld unit is used to build the ice from scratch and for on-ice repair and maintenance once the ice has been built.

Hose

Attach the REALice r1x to the end of the flooding hose. The r1x will treat the water as it flows through the nozzle. Use it whenever there are spot repairs needed. Never put regular water on ice that has been made with REALice as regular water and REALice water are different (like diesel and gas – putting the other into your car will cause problems – putting the other onto your ice will too!)

Two nozzles

The handheld unit comes with two different caps. Both diffuse the water in fine misting sprays: the black cap has a wider diffusion than the blue cap. For best result, point the REALice r1x upwards at a 45° angle and move it from left to right and back again.

Building the ice for the first time

Use the REALice r1x to make thin layers of water and let it freeze before the next layer of water is put down. Build the ice for approximately 5 mm/0.2” or until the ice is thick enough so the studs on the ice resurfacing machine will not touch the pad below.

Ice repair and maintenance

Choose between two nozzles for different water flow when repairing or maintaining the ice. Always build the ice in thin layers for the best result.

Cold water

Always use cold water, below 18°C/64°F, when building and maintaining the ice with the hand unit.

REALice r4x, r6x, r10x, r12x – Wall Unit

Regardless which REALice wall unit is required, it must be integrated to the existing piping before the filling station. All water going into the floodwater tank must be treated with REALice prior to resurfacing.

Piping

Install the REALice wall unit at the piping and securely affix it to the wall, both before AND after the REALice unit. A mixing valve is recommended, but not mandatory. The pipe after the REALice unit must be the same size as the pipe going in. Do not reduce it.

Pressure meter

The static water pressure needs to be at least 45 PSI/3.1 bar (55 PSI/3.8 bar for the r12x) in order for REALice to properly treat the water. The pressure meter gauge shows the pressure when static and open. To see the maximum water flow, refer to the technical specifications chart.

Cold water

Always use cold water when using the REALice r4x, r6x, r10x, r12x wall unit. Normally the water temperature should be below 64°F/18°C.

Ice resurfacer

Fill up the ice resurfacer as close to ice resurfacing as possible for best result. The effect of REALice treatment will stay in the water for a minimum of 24 hours.

Ice resurfacer speed

Take your time when resurfacing the ice. A normal resurfacing of the ice will take about 10 minutes. Slow down in the corners.

Ice thickness

Ice thickness can be decreased to approximately 30 mm/1.2” due to the harder and more durable ice, produced by REALice treated water.

Warranty

The warranty covers:

- The product is warranted for 5 (five) years from the date of delivery.
- Watreco warrants that on delivery the product is free of faults in materials, manufacturing and function.
- Watreco warrants that the product is identifiable on delivery.
- The warranty covers all types of fault which may arise in normal use of the product.
- Under the warranty, Watreco or its representative will mend the damaged product or replace it with a new one free of charge.
- In the event of a claim under the warranty, Watreco's representative should be contacted in the first instance. Watreco may be contacted in the second instance.
- Watreco or its representative will decide whether the product is to be mended or replaced.
- Where the damaged product is to be replaced, the product should be returned to Watreco's representative for inspection in the first instance. The customer is to pay the shipping costs. The product may be sent to Watreco in the second instance.
- The replacement component will, in the first instance, be shipped free of charge from the warehouse of Watreco's representative, or from Watreco if necessary.

The warranty does not cover:

- Cases where the product has been changed, modified or opened.
- Cases where the product has not been used in accordance with the instructions.
- Cases where the product has not been installed in accordance with the installation instructions.
- Cases where the product has been used for a purpose other than that for which it was intended.
- Cases where the label identifying the product has been removed.
- Cases where the product has been subjected to pressure or temperature exceeding that set out in the instructions or the values stated on the product.
- Cases where the internal channels in the unit are clogged by particles in the water.
- Cases where the damage has arisen through external force such as hitting, bending or twisting.
- Damage which may arise to other property or persons due to the product or deficiencies in the product.
- Other costs which may arise due to the product or deficiencies in the product.
- Any costs, charges or taxes which may arise when replacing the product.
- Costs arising for removing and installing the product.