

Model K29iX Direct Expansion Immersion Cooler For Water Triple Point Cells

The new Direct Expansion Immersion Cooler takes a fresh approach to TPW realization; an approach focused on safety and usability. This innovative system cools the cell with a small liquid carbon dioxide cylinder and a heat pipe, eliminating the need to handle or store any cryogenic material - no liquid nitrogen, no dry ice. Simply attach one of the room-temperature cylinders to the Immersion Cooler base, insert the probe into a chilled cell, start the flow of carbon dioxide and come back in 30 minutes. With less than five minutes of user time, the Immersion Cooler safely forms an even, long-lasting mantle in any standard cell.

A miniature expander meters the release of 20 ounces of carbon dioxide from each storage container to uniformly remove heat from the center well of the TPW cell, forming a mantle in approximately 30 minutes. Configuring the system to use a full cylinder for each realization eliminates the risk of cell breakage inherent in unattended mantle formation with conventional cooling methods. It also reduces user mediation in mantle formation, improving repeatability.

Interchangeable contact tips adapt the cooler to fit the center well of any standard size, commercially available cell. The system may be customized for non-standard cells, ensuring even ice formation. The bushings attach to a threaded stud at the probe tip, building additional mantle thickness at the bottom of the thermowell, to extend mantle life. The Immersion Cooler may also be used to rebuild mantles quickly and easily, allowing the user to maintain the fixed point almost indefinitely.

Package includes three fully charged cylinders it is ready for use on arrival. Additional filled carbon dioxide cylinders are available for purchase or exchange at minimal cost from Pond Engineering and may be shipped by overnight air or ground service to meet your needs.

The K29iX Direct Expansion Immersion Cooler builds uniform mantles so much more safely, easily and consistently that we expect it to quickly become the new standard for TPW realization.



Specifications

Typical Mantle
Formation Time
With 20 Oz. Cylinder: 20 to 30 Minutes

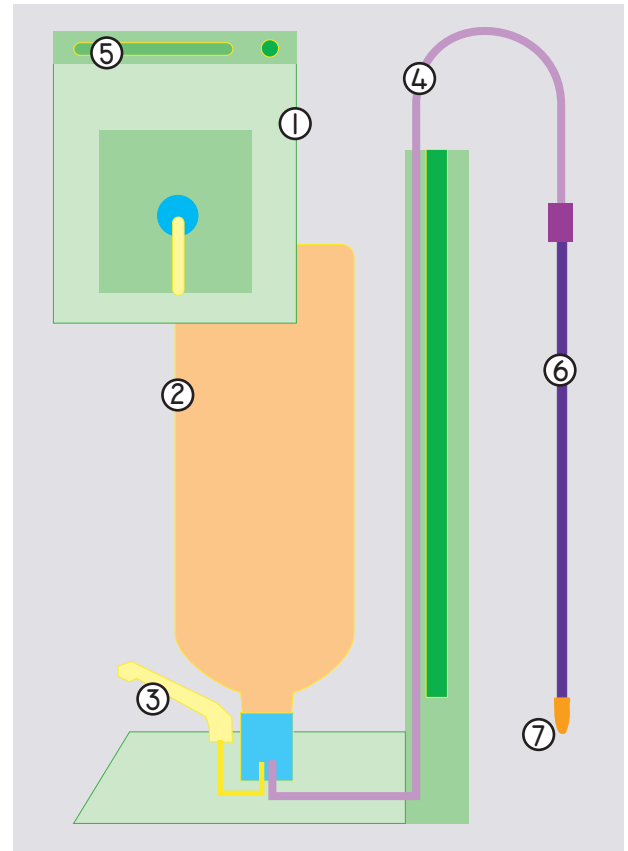
Expander Probe: 304 Stainless Steel

»0.250"(6.4mm) Dia.

To Order or For More Information:

Call Pond Engineering at (303)651-1678
or FAX (303)651-1668
or E-mail stanpond@pondengineering.com

- ① Stainless Steel external construction provides long life and durability.
- ② Safe, efficient, reusable CO2 cartridges provide rapid cooling without special storage and handling precautions.
- ③ Easy access valve comes configured to release 20 ounces of carbon dioxide over 30 minutes to form a mantle.
- ④ Plastic jacket protects delicate capillary tubes.
- ⑤ Built-in storage for expander tubing keeps workstation neat.
- ⑥ Specially constructed heat pipe produces a uniform ice mantle thickness.
- ⑦ Interchangeable contact-enhancing tips provide additional ice formation at the bottom of the center well, lengthening mantle life.



Point of Application

