

# CANNABIS INDUSTRY SELECTION GUIDE

Liquid

Vacuum Cold Trap

Refrigerated



# "If your chiller is down, you're not making money."

# **PolyScience**<sup>®</sup> COMMON APPLICATIONS

# Extraction



**Extraction** can be done in a multitude of ways, but all require some form of cooling. Whether a system uses butane or CO<sub>2</sub> or alcohol, it has temperature requirements for all its solvents. PolyScience fits perfectly in all-in-one extractors, rotary evaporators and turnkey setups.

# Fractional Distillation

PolyScience products excel at cooling **Short Path Distillation** apparatuses.

The condenser turns vapors into fractional products. Precision here is key. You only want to condense those vapors of your end product, not the various other solvents and chemicals. PolyScience Refrigerated Circulators or Recirculating Chillers will provide you with the precision cooling you need to get the cleanest, clearest extracts.

The cold trap is critical in terms of product purity. Separating the toxins and impurities is a task that should not be trusted to simple dry ice. Dry ice is cold, but it's also volatile at room temperature. That means a loss of temperature consistency as it sublimates. It

also means a loss in your profit margins, because that dry ice needs to be constantly replenished. Use a PolyScience Immersion Probe Cooler instead.



## VACUUM COLD TRAP CHILLERS



Excellent for trapping and Dewar-type applications, these low temperature Immersion Probe Coolers eliminate the need for expensive dry ice or liquid nitrogen. A durable, flexible hose allows for convenient placement of the cooling probe. Also available with a 180° bent probe for improved benchtop use.

Rapidly reach extreme cold and hold it there consistently with low power expenditure.

## **Immersion Probe Types**



Engineered specifically for use with Dewar Style Cold Traps, our revolutionary Bent Immersion Probe changes the way your lab is organized. By allowing for the probe to hang directly on the edge of the glass, no additional space or support is required.



## DURACHILL® PORTABLE RECIRCULATING CHILLERS

DuraChill<sup>®</sup> Portable Recirculating Chillers are the most effortless chiller on the market. With a wide range of new and exclusive features, DuraChill<sup>®</sup> Chillers promote ease of use, minimal maintenance and environmental safety. DuraChill<sup>®</sup> has been designed for future migration to low global warming potential natural refrigerants.

#### Full Color Touch Screen Display

The color touch screen display gives you all the information you need at a glance, in five selectable languages. The screen will display continuous status of set temperature, actual temperature, reservoir fill level and output pressure as well as the status of your air filter.



#### Front Fill Reservoir

A conveniently located fill port on the front means you no longer have to go to the back of the chiller to open and fill the reservoir.

#### Self-changing Filter System

DuraChill<sup>®</sup> features the DynamicFilter™ System which is preprogrammed to change the filter once a month for a two-year period and can be adjusted to suit your operating environment. This relieves you of the burden of preventive maintenance.



Continuous Liquid Level Monitoring Because pump seals will fail in as little as 30 seconds of being run dry, DuraChill® Chillers include a state-ofthe-art capacitance liquid level sensor on the reservoir to protect the pump from premature failure.



WhisperCool® Noise Reduction DuraChill® utilizes our patented WhisperCool® system, which evaluates the demand for cooling from the application and then slows the fan speed to the minimum necessary, making the chiller extremely quiet without sacrificing performance.

UV Biological Growth Inhibitor As part of our commitment to the environment we developed a UV light system that will continuously control biological growth in the fluid path without the need to add chemical growth inhibitors, preventing algaecides from being released into the world's waterways.





The self-changing filter keeps dust out of your system, for maximum uptime.



Our UV light will save you the cost of algaecides and keep waterways clean.

# You're Welcome.

## HIGH CAPACITY RECIRCULATING CHILLERS



Fully configurable to complement your process, these air or water cooled chillers feature a variety of pump and connectivity options and can be configured with a heating element that can provide heat up to 9kW and 90°C.

Powerful portable chillers with high cooling capacities and a multitude of options to fit virtually any need.

For a full list of configurable options, please contact PolyScience Sales.

## BENCHTOP RECIRCULATING CHILLERS



Powerful cooling performance in a compact package. PolyScience Benchtop Chillers deliver superior temperature ranges and consistent performance without taking up valuable floor space.

These powerful units are ideal for use with rotary evaporators, vacuum systems, spectrometers and other analytical instrumentation. Reaches temperatures as low as -20°C.

## **REFRIGERATED/HEATED CIRCULATING BATHS**

With sleek lines and large digital displays, our Circulators are easy on the eyes. They're also exceptionally hard working and easy to operate and maintain.

- Reservoir sizes from 7 liters and up
- High-tech interface options including 7-segment displays, Color digital displays or Touch-screens
- Working temperatures from -40° to +200°C



### **Top Products**

Circulators MX07R-20 AD15R-40 SD07R-20 AP07R-40 AD07R-40 AP15R-40 SD07H175 (Heat Only)

### Immersion Probe Coolers

IP-60 (1.5" Rigid or Bent Probe) IP-80 (1.875" Rigid or Bent Probe) IP-100 (3" Rigid or Bent Probe)

Chillers LS51MX1A110C CA10A3T1-41AA1N 6860T56A250D DTA504B

### Additional Products

Low Temperature Fluids

# The "coolest" company in cannabis.





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Environmental Management System



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