

HYVAC PRODUCTS, INC.

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COLD TRAPS

To protect and enhance your valuable mechanical vacuum pump. Vacuum pumps perform better and last longer when used with the appropriate inlet trap or filter. Cold traps work on condensable gases such as water and solvents. They freeze them so they are out of the vapor stream so they do not get into the vacuum pump. They vary in ease of use and price and they are listed in order of economical to more expensive. They all use the same basic principle just vary on mechanism and performance.

DRY-ICE FORELINE TRAP

DIT - Series

A convenient, low-cost way to trap excess condensable vapors that can enter the mechanical vacuum pump. This tabletop trap can also be used for some sample freeze-drying. Dry ice and alcohol is combined 50/50 to produce slurry in the 3-quart trap well. The surface of which can reach -75 degree C that will condense most volatile materials.

The trapping surface of the center well is visible during operation through the top view ring. Defrost and clean up is made easy by lifting out the trapping well after venting.

Construction is of 304 stainless steel that has been electropolished. The outer body wall is of .065 in. thick and is stainless steel with welded-in ports. The cold well has an acrylic plastic cover and could also be used as a vacuum chamber.

LIQUID NITROGEN COLD TRAP

ATN - Series

A demountable reservoir-type, liquid nitrogen cold trap designed for use with a rotary vane mechanical pump. Since the trapping of water and oil vapor is so complete and irreversible at liquid nitrogen temperatures, base vacuum in the high 10^{-6} Torr range can be achieved.

The liquid nitrogen reservoir can be removed for cleaning from the top via a quick clamp O-ring flange. An NW16 side port can be used for diagnostics, gauges or venting. For ease of installation in a system or platform, mounting tabs are provided on the trap body. These tabs fit the optional steel mounting plate. Liquid nitrogen capacity of the reservoir is nominally one liter. Construction is of electropolished 304 stainless steel.

MECHANICAL TRAPS

These traps are basically small refrigerators and vary depending on the amount of air to be processed. This is the most expensive cold trap, but also the one needing the least attention and the easiest to use and maintain. Trapping From -50 to -90 degrees for varying condensables.