



Temperature Control Accessories

Extended Temperatures

Doty probes have variable temperature capabilities, and extended temperature options are also available.

Wide Temperature range:

- 80°C to +120°C for NB Std VT
- 140°C to +170°C for WB Std VT
- 150 to +150°C NB XVT (extended VT)
- 150 to +250°C WB XVT (extended VT)
- 170°C LXVT (NB and WB low extended VT)

(with a Doty temperature controller). To extend the temperature range, we add extra insulation and thermal baffles, utilize special materials, add additional room air, and in some cases, add extra dewars to the probe.

Probe Exhaust Dewar

A Probe Exhaust Dewar is required for sample temperatures above 160°C or below -100°C (except with cryogenic, high-temp, and a few other special probes) which have a different exhaust system. The exhaust dewar is included in extended VT options (described above) but may be ordered separately. Please supply the probe serial number when ordering to ensure that the proper dewar is supplied.

95980 Probe Exhaust Dewar..... \$ 850

50-Liter Liquid Nitrogen Dewar

This dewar is intended to be used with the Doty Cold-Gas System. (A Nitrogen Dewar already owned or purchased locally may be used if compatible with the cold-gas system, however specifications must match.)

86020 50-Liter Liquid Nitrogen Dewar.... \$1575

Cold-Gas Supply Systems

Doty cold gas supplies include a heat exchanger with one, two or three intertwined pre-cooling coils; appropriate cooling coil sets; and one, two or three transfer lines to carry the cooled gas to the probe. (The pre-cooler counterflow heat exchanger in the neck of the storage dewar greatly improves cooling efficiency – an important consideration for extended runs.)

The heat exchanger connects to the Doty probe with flexible, foam-insulated transfer lines with fully dewared quick connects. This system provides efficient cold gas supply for temperatures down to -150°C. The cold gas supply shown below is connected to a probe at one end and connected to a flow meter and regulated gas supply on the other. This system is designed to be used with the standard 50-liter nitrogen dewar and probe exhaust dewar, (listed in the left column) both of which **must be ordered separately**. (A special Cold Gas system is supplied for LXVT.)

99860 Single-Supply Cold-Gas System ... \$3,400

This cold-gas supply is for, standard speed or wide-line probes and other single-supply applications. Also for OptiMAS™ cold zone cooling when VT gas is supplied by a separate system.

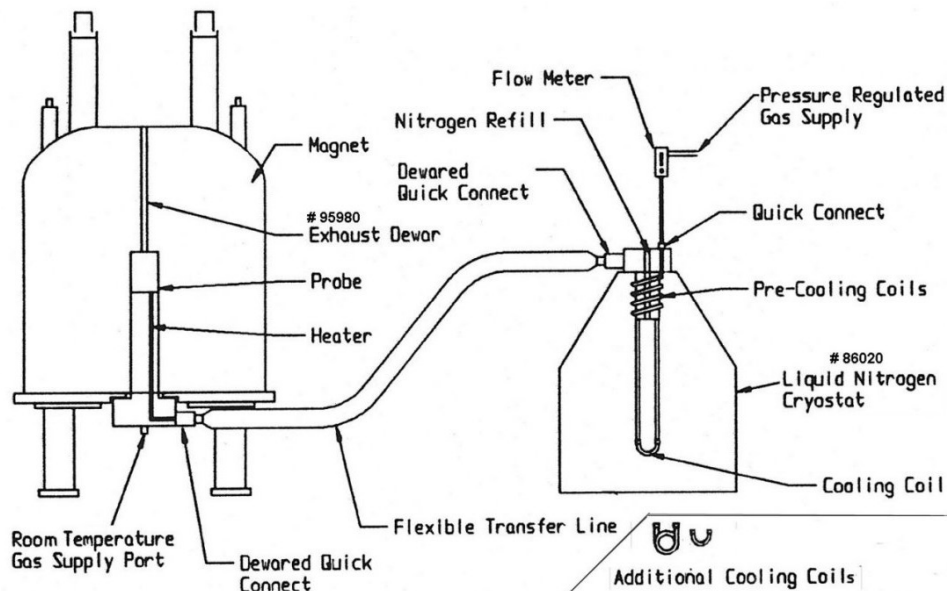
95970 Dual-Supply Cold-Gas System \$5,000

For spinning with separate bearing and drive or for other dual-supply applications. (Includes two intertwined pre-cooling coils, two cooling coil sets, and two transfer lines.)

95975 Triple-Supply Cold-Gas System \$6,650

For dual-supply spinning and OptiMAS “cold zone” cooling. (Includes three intertwined pre-cooling coils, three cooling coil sets, and three transfer lines.)

Doty Cold Gas Supply – Installation Diagram (Single Supply Shown)



Cold-Gas System



(US\$ – Foreign prices higher, plus taxes.)