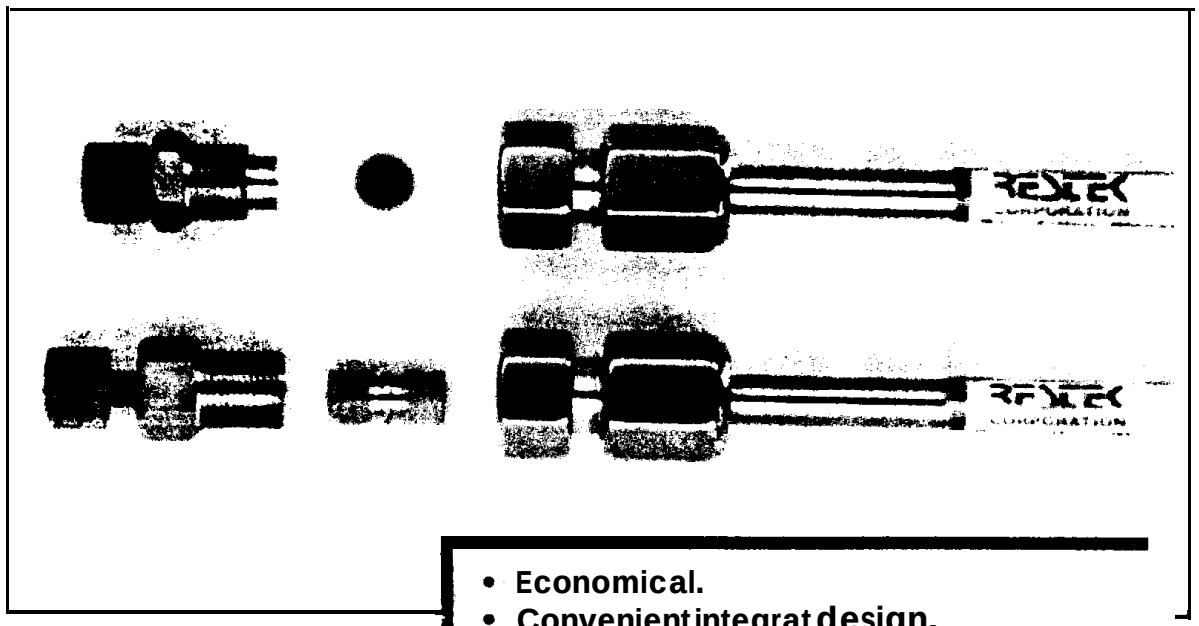
New Integal HPLC Column Protection System



- **Economical.**
- **Convenient integrat design.**
- **Replaceable external frit.**
- **Slurry packed guard columns.**
- **No holder or connecting tubing needed.**

The most recent LC/GC HPLC user preferences survey' [1] indicates guard column usage is one of the best approaches to extend column lifetime and reduce operating costs. Increased analytical column reproducibility and reliability serve as justification for the reported expenditure of nearly 25% of column budgets on guard columns. An effective guard column prevents particulate matter. sample impurities, and strongly retained (i.e. nonelutedj compounds from entering the more expensive analytical column and degrading its performance. Replacing the guard column at reguIar intervals reduces the risk of selectivity or efficiency alteration of the primary column from contamination. The design, contents and connection of a guard column should ensure sample dispersion is minimized. A guard column that is poorly packed or connected improperly wili adversely affect the performance of the analytical column.

In response to this need the Restek wizards have designed a new, economical and convenient integrated HPLC column protection system. The system. which will be introduced at PittCon 1996, features an innovative column end-fitting that can be used with either an integral guard column or replaceable external inlet frit. Since the fitting is an inherent part of the analytical column. a separate guard holder or additional connecting tubing is not needed. This eliminates undesirable extra-column band spreading which can adversely affect peak shape and column performance. The guard columns utilize a simple 1cm by 4.0 mm cartridge design which provides excellent protection at an economical price. In addition, the guards can be slurry packed with the same packing material as the analytical column to ensure optimum performance and sample compatibility.

Alternatively. the system makes it possible to cIean or replace an external frit at the column inlet. By simply removing the retaining nut. the external frit can be removed without loosening the column end-fitting or disturbing the packing bed. The external frit prevents particulate matter. which can distort peak shape and cause high back pressure, from entering the column.

(1) LC/GC, 12 (12) 890-898 (1994).

Contact YOUR local distributdr for more information on this complete HPLC guard system.

Have you received Restek's HPLC Catalog?

If not, call your local distributor for a FREE copy.

SilcoCan" Canisters for All Air Sampling Needs!

A complete line of SilcoCan" canisters for air sampling is now available from Restek!

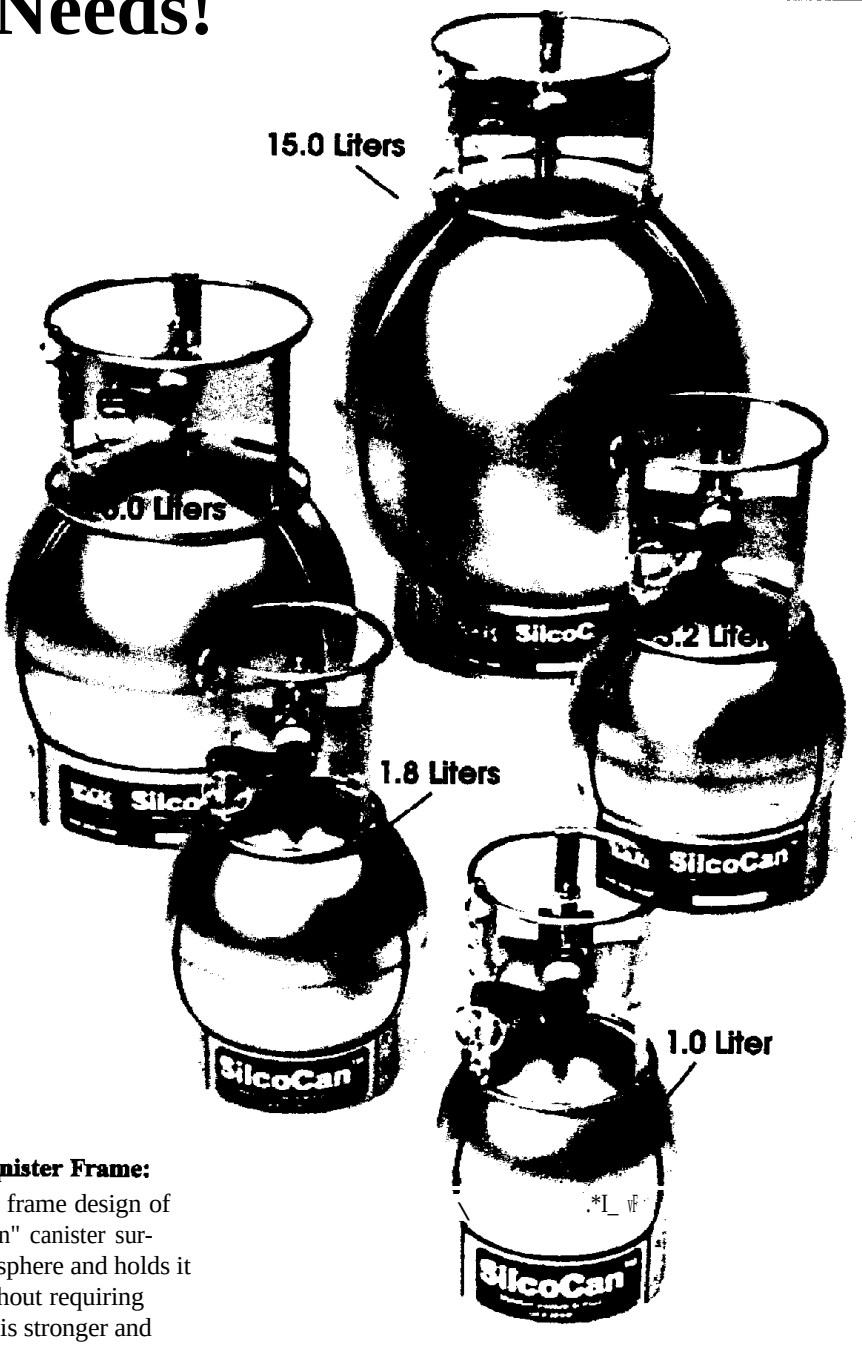
The small 1.0 and 1.8 liter canisters are perfect for grab samples and soil gases. The 3.2, 6.0 and 15.0 liter SilcoCan" canisters are great for integrated ambient air samples. The 15.0 liter SilcoCan" canister is an excellent size for making standards for analytical testing and easily allows for 24-hour sampling as well.

All sizes offer the same innovations as our 6.0 liter SilcoCan'" canisters:

Fused Silica Lining: Each SilcoCan" canister is lined with a layer of fused silica. This layer is chemicalIy bonded to the interior surface using Restek's proprietary Silcosteel" process. This layer provides unsurpassed inertness for active compounds and will not crack from harsh handling in the field or during transport.

l/4 Turn Valve and Locking Pin: Restek has incorporated Parker's l/4 turn diaphragm valve with an indicator plate to help analysts easily determine if the valve is open or closed. The locking pin prevents the valve from accidentally opening during transport.

Vacuum/PressureFittings: Silcocan" canisters are equipped with Parker's Ultraseal fittings that have metal O-rings which increase sealing ability and eliminate leakage. Also, these fittings cannot be overtightened.



Rugged Canister Frame: The unique frame design of the SilcoCan" canister surrounds the sphere and holds it upright without requiring welding. It is stronger and more functional than a welded frame, eliminating areas where adsorption of active compounds can occur.

Shorter Cleaning Cycles: Each SilcoCan" canister and valve can be heated to 250"C, allowing volatile organic compounds to be removed quickly while the valve is attached to the canister during the cleaning cycles.

SilcoCan"	Cat-#
1.0 Liter	24201*
1.8 Liter	24202*
3.2 Liter	24203*
6.0 Liter	24200*
15.0 Liter	24204*

'The SilcoCan" Canisters may be purchased with a Silcosteel" treated valve. Just add the sufffx number "-650" fo the appropiate catalog number: