

LOW MAINTENANCE SAMPLING

Eliminates Peristaltic Pumps

Eliminates monthly peristaltic pump retubing & recalibration.

Conserves reagents by precisely dispensing exact amount required.

Greater metering accuracy.



Allows Batch Sampling for increased ppb sensitivity

Easy range changes without changing hardware.

Field-proven.

Digital Injection System
Star P/N: 200008-2

Star's Digital Injection Sample System (P/N: 200008-2) uses pressure delivery to eliminate peristaltic pumping. Particulate sample handling and non-contact of the sample/reagents with injection system mechanisms have been retained. The infinitely variable sample/reagent flow control design overcomes past limitations, which often required dilution or multiple pumps, depending on the application.

While peristaltic pumping is still preferred for some applications and has long been a successful method of sample delivery since it was first introduced in 1971* for on-line TOC analysis, there are noted drawbacks and deficiencies.

The ability to handle particulates and the use of relatively inert, corrosion-resistant tubing were the major design features of interest. The sample and corrosive reagents were never in contact with the pump/motor mechanisms, making them very reliable for the applications intended. However, to maintain their accuracy, frequent retubing was required, as dimensional characteristics of the tubing would change with wear, caused by the squeezing action of their external rollers. The resultant metered flow rate changes required maintenance-intensive retubing and recalibration in order to maintain analyzer accuracy. Some samples were hindered by the pulsed sample delivery, inherent in peristaltic flow. Analyzer range changes often required changing peristaltic pumps and motors to accommodate different flow rates.

The Star Digital Injection System is the method of choice for certain applications, as suggested by your Star Representative.

*The Star team (and previously owned Astro International Corporation) introduced the world's first on-line TOC analyzer in 1971. Peristaltic pumps were chosen for sample and reagent delivery for the applications of that time period.