

MC3000 and SDS3000 Accessories

Mercury analysis at ppt levels

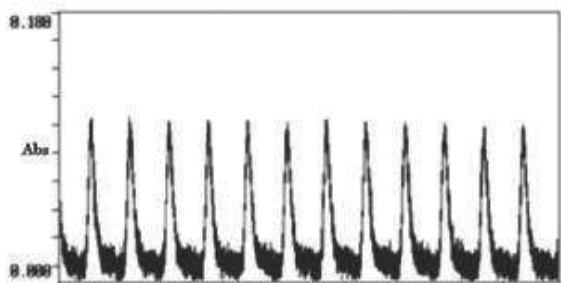
MC3000

Measure mercury at less than 10 ppt with the MC3000 Mercury Concentrator

Regulations for mercury analysis are pushing the required detection limits continually lower, so that they are well below the level achievable using the standard cold vapour technique. The MC3000 mercury concentrator accessory for the HG3000 addresses this problem. By concentrating the mercury vapour on a gold foil, then heating by a patented Radio Frequency, detection limits of five parts per trillion can be readily achieved. The very quick and centralised heating results in the unsurpassed sensitivity and reproducibility. The MC3000 accessory is fully controlled by the SavantAA software and the analysis can be carried out unattended when used in conjunction with the SDS3000 auto sampler.



The RF coil surrounds the mercury concentration cell shown in front of the absorption cell located in the light path.



Mercury trace at 20 ppt

SAMPLE	CERTIFIED VALUE	MEASURED VALUE
Water 9645-9647	1.74 ppb	1.76 ppb
Sewage Sludge	3.23 ppb	3.65 ppb

SDS3000

Fast, sturdy and reliable auto sampler

The SDS3000 is a precision engineered X-Y-Z auto sampler. Designed and fabricated by GBC Scientific Equipment, this affordable auto sampler provides accurate and fast analysis due to its durable, reliable and sturdy design. Supplied with four sample racks to hold 240 sample vials each of approximately 14 mL and a standards rack to hold 10 standard vials plus a blank each with a volume of approximately 50 mL. PTFE and PEEK material is used to provided a metal free liquid flow path. Variable continuous flow sample probe rinse station with peristaltic pump minimizes sample contamination and carryover. Software controls include rinse time, delay time, number of replicates, rescale rate, recalibration rate, measurement time and analysis order. Full random access capability is standard. Up to 360 samples can be loaded using 7 mL tubes.

An optional auto dilutor will soon be available. The syringe type auto dilutor will be cleverly incorporated inside the SDS3000.

