



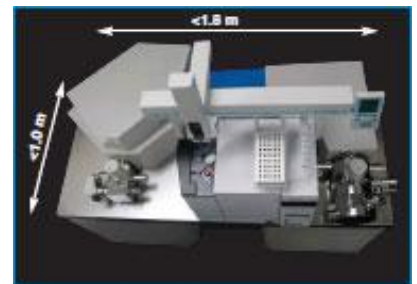
MSI introduces a new compact Autoconcept designed specifically for Environmental Analysis. This instrument boasts of smaller footprint, better S/N ratio, multi-technique multi-GC inlet and fully baked ion optics.

In addition to performing dioxin and furans analysis specified by methods USEPA1613 and EN1948, it can also be used to analyze POPs, pesticides, PAHs, PCBs, PBDEs, BFRs, screening, Phthalates, Chlorobenzenes, DDT, HCH, PBTs, PCTs, PBBs, PCDFs, PXDDs, PXDFs, PBDDs, PBDFs, Toxaphene, Chlordane, dirty dozen. Typical products that are analyzed are Food, Feed, Fish, Milk, Dairy products, Eggs, Liver, Environment, Stack, Soils, Water, Sediments, Air, Emission, Bio-indicator

### Compact Instrumentation

The Autoconcept features the smallest footprint of any instrument in its class. With space a premium resource in analytical laboratories, AutoConcept Environmental requires less floor space than other instruments in its class.

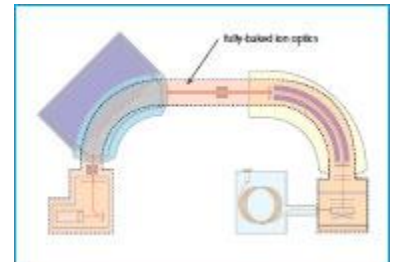
The size of the instrument is equivalent that to a Pool Table!



### Fully-Baked Ion Optics

Unlike other mass spectrometers of its type, Autoconcept features full baking facilities along the entire flight path. This helps remove contaminants from the ion optics without the need for constant mechanical cleaning, maintaining the sensitivity and performance of the instrument at its peak.

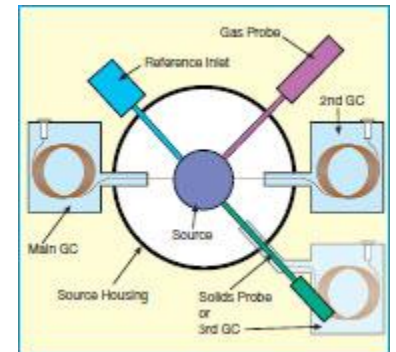
Not to mention this feature also makes it easy to maintain.



### Multi-technique Capabilities

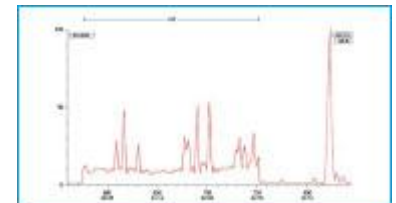
Autoconcept provides much more than one analytical tool. It can be fitted with other inlets and techniques. Carefully design of the source and inlet systems allows the user to operate 2 or even 3 GCs independently should there be a need. Having different GC configurations simultaneously running allows rapid switching of analyses types without any downtime.

Other accessories such as gas probes and solid probes and a purpose built reference inlet system add to the ultimate flexibility of the Autoconcept.



### Superior Signal-to-Noise

As well as the reduced contamination issues provided by the incorporated baking system, Autoconcept features an improved collector region and flight tube to further enhance detection limits.



High signal-to-noise ratios are obtained without needing to resort to ion counting and summation techniques. Autoconcept offers this excellent sensitivity at the high resolutions required for successful dioxin and furans analysis. The combination of a source optimized for high sensitivity in electron impact mode, an analyzer with the ultimate in chemical background rejection and a low noise, high bandwidth detector system provides unmatched sensitivity at 10,000 resolutions and above.

## Applications



Protocols for environmental contaminant analysis specify high resolution mass spectrometry as the preferred detection method following high resolution gas chromatography. Only this level of instrumentation can eliminate responses from other materials present in complex matrices at sufficiently high sensitivity.

The New Autoconcept is the instrument of choice for these dedicated analyses, in particular those with exacting requirements such as the dioxin and furans protocols specified by methods USEPA1613 and EN1948

**Peak Profile Analysis** Occasionally, even at high resolution, unexpected responses can be obtained. To solve this problem and to identify the cause, Autoconcept adds another tool to the analyst's armory.

A peak profiling method helps identify the origin of such responses. Instead of recording peak top responses, Autoconcept can sweep a mass region and acquire the entire peak profile, thus allowing instant recognition of any underlying interfering peaks.

