



All instruments require two gas supplies: (i) an inert carrier gas (helium recommended); and (ii) high purity oxygen (minimum 99.9995%). The strict specification for oxygen is associated with the need to reduce the nitrogen 'blank' contribution to an inconsequential level. Additionally, GC-type gas filters are also usually fitted to prevent trace organic species and water entering the combustion system.

The choice of sample introduction systems will depend on the application and the sample type. For solids or viscous liquids, samples are weighed out into tin capsules; for liquids, samples can be sealed in individual aluminium vials or introduced via a liquid auto-sampler. Both capsules and vials are pre-cleaned and dried to avoid trace contamination from oils and water acquired during their manufacture. Instruments are marketed with either simple 'one shot' introduction interfaces or a carousel type autos