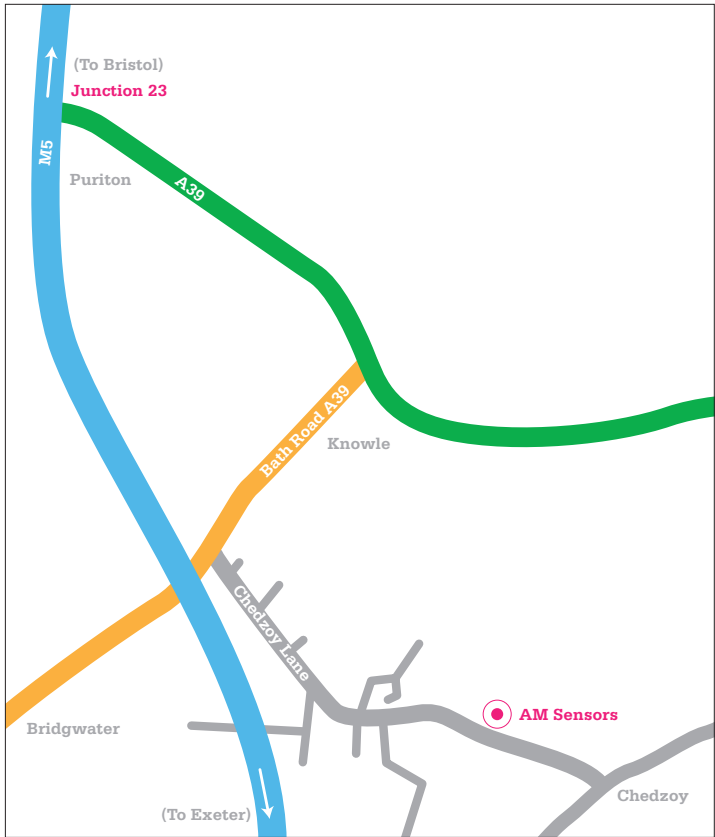


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**Contact Information**

If you would like more information on the products and services that AM Sensors offer, please contact us either by phone/fax or by email

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**How to find us**



Sampling Equipment

For the power industry



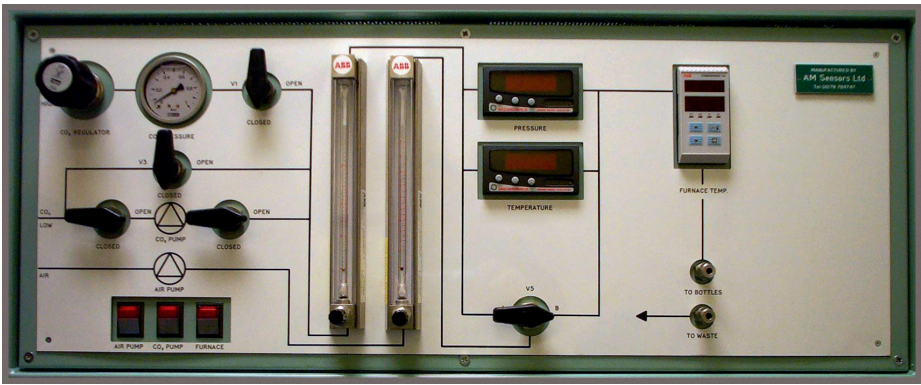
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# Portable ‘in hand’ samplers



Housed in a light duty carry case the AMS portable ‘in hand’ samplers are easily transported and have a high impact Perspex door to allow visibility of readings when closed. Both the standard and advanced models have an internal foam lined area with clips for safe carrying of glass sample bottles.

### Portable ‘in hand’ samplers

The standard model includes a VA flowmeter with an inbuilt needle valve to set the flow rate and a resettable timer to monitor the sample time, with an option for mass flow measurement if required.

Our advanced model has inbuilt temperature and pressure sensors with a videographic recorder which logs and displays the runtime, flow rate, flow totals, sample pressure and sample temperature to enable mass flow calculations. The videographic recorder is used in utility applications audited by the EA, the ‘tamperproof data’ can be downloaded to a PC to provide traceability and proof of samples taken.

### Total oxidation units

Designed to be mounted on a trolley (also available) for ease of movement around site, the AMS TOU’s are available as either a single stream unit for sampling air or a dual stream unit for sampling air and Co2 in the carbon 14, tritium and sulphur 35 detection process.

Both models oxidise the sample gas within a reaction tube in a heated environment before flowing through bubbler sample bottles. The sample pressure and temperatures are displayed along with

the flow rate and flow total. The furnace temperature is automatically controlled to any set-point entered up to 1200DegC.

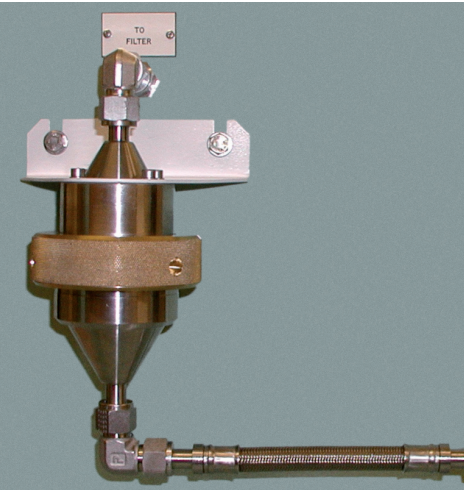
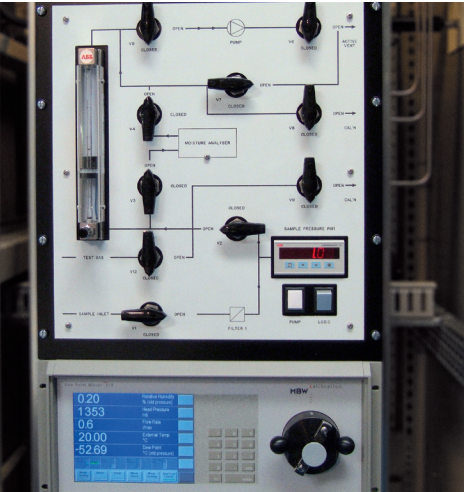
### Particulate samplers

AMS have manufactured high pressure and low pressure trolley mountable particulate samplers, the high pressure units are designed to accept high pressure reactor gas (CO2) upto 40 Barg and the low pressure unit to sample air between 2 barg and atmospheric pressure.

The HP & LP particulate samplers are self-contained pump systems for extracting sample gas from vents, HVAC ducts and room spaces etc. The gas is passed through a purpose built filter assembly to capture airborne particulates on a special removable membrane (GFA filter paper).

### Moisture samplers

AMS manufacture gas sampling systems to help power stations monitor and control the levels of moisture within reactor gas. The sampling systems are housed in a 800 x 600 x 2000 steel cubicle with front access for users and rear or side access for maintenance. Each cubicle is custom designed to allow fitting of a sites approved moisture analyser, there are also user panels fitted for operator, chemist and maintenance tasks.



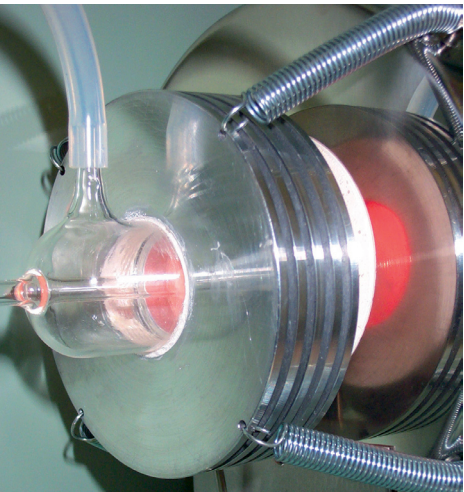
### Reaction tubes and furnace

AMS have designed and manufactured a new reaction tube as a direct replacement for the previously supplied Severn Science tubes for use in Tritium, Carbon 14 and Sulphur 35 detection process. Design improvements include a reduction in the number of bonded joints to improve its integrity and replacing the wool with a glass ciner to improve the oxidation efficiency.

Rigorous testing witnessed by Magnox plc and approved by British Energy resulted in oxidation of less than 10ppm when heated above 900 Deg C compared to 50ppm at 1100 Deg for the previous design.

### Laboratory glassware

AMS can supply a range of laboratory glassware to use with sampling systems. The portfolio includes standard products to meet those currently in use with older samplers and the AMS supplied samplers, and if required, we can normally design and manufacture to suit a customer’s unique specification.



### Spares stocking

We carry stock of critical components for samplers including glass reaction tubes, tube furnaces, type K thermocouples, pumps, VA flow tubes, videographic recorders, controllers, indicators etc.

### Service and calibration

Our instrumentation engineers are Magnox and BE security vetted allowing them site access to carry out routine maintenance and calibration tasks to ensure that the sampling systems are working correctly and efficiently.



### Training

User manuals are supplied with all AMS samplers, however should further operator or maintenance training be required we can supply packages to suit your needs, this can be on-site or at our premises.

“Wherever possible, AMS samplers always use stainless steel fittings and tubing for internal flowpaths.”

