The Single Sampling System (SSS)

THT product code = ARCSYS-SSS

The Single Sampling System comprises:

- Gas collection cylinder (50ml) with integrated valve
- Fully integrated software control
- Actuator controlled ball valve, pipe work and support bracket

The Single Sampling System (SSS) option allows for gas/vapour release at a specified temperature through an automatically controlled ball valve into a collection cylinder.

The Single Sampling System (SSS) option allows for gas collection at any time during the test or on test completion - this is set during software set-up. The gas is collected into a cylinder and then can be analysed using additional equipment.

Figure 1 shows the simple schematics of the connection to the calorimeter.

Figure 2 shows the SSS situated inside a standard esARC system. Note the 50ml collection cylinder. Larger cylinders may also be used.
The Single Sampling System (SSS)

Hardware configuration is simple. A Swagelok T-piece is connected to the top of the pressure through tube.

From this piece one connection goes to the pressure transducer line and the other line goes to the Actuator controller.

Relevant pipe work and Swagelok T-piece is provided.

The collection cylinder has a Swagelok valve attached and fits to the actuator assembly by a Swagelok lock fit connection.

The software set-up screen is shown above. The SSS option is ticked and a collection temperature and collection period is defined. This will open the SSS actuator at the defined temperature for the defined period.

There is also the option to select ‘Cool/Idle Mode’. If this is selected then the system will collect gas upon test completion.

The test will run automatically until completion. At the end of the test the user will close the valve and remove the cylinder. A lock fit connection allows for fast and easy removal.