

### HSC30 Portable Sample Cooler

The HSC30 Portable Sample Cooler is designed to allow clean steam and Water For Injection(WFI) samples to be taken quickly and easily whilst maintaining product sterility during testing.

#### Design conditions

Coil design pressure	8.0 barg
Shell design pressure	6.0 barg

#### Installation

Whilst the HSC30 is designed to be portable, care should be taken during testing to ensure that the unit is securely positioned.

Cooling medium; typically mains water, should be connected to the cooling water inlet connection. In order to allow the flow of cooling medium to be controlled during testing a throttling valve should be located within easy reach of the sample cooler unit. The cooling water outlet should be piped to drain.

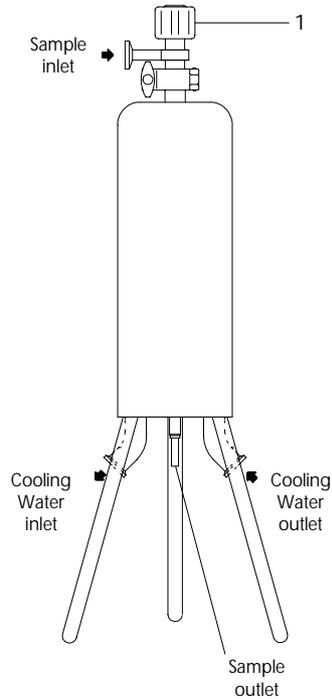
A suitably rated flexible hose should be connected between the steam/water system being tested and the HSC30 unit. An isolation valve should always be installed at the sample point in the steam/water system.

In order to simplify testing, an HSV60 sample valve valve(1) should be fitted on the HSC30 sample inlet connection. When used with the HSC30 the HSV60 system connection can be coupled directly to the sample inlet connection.

A suitable vessel should be on hand to collect the cooled sample during testing.

#### Operation

1. Open the cooling water inlet valve and ensure that a flow of cooling medium is present.
2. Slowly open the sample inlet valve(1) until a sample is obtained at the sample outlet. Excessive sample flow will result in a high sample temperature.
3. Once a suitable sample has been obtained the isolation valve at the system connection should be isolated. With cooling medium still flowing the sample valve on the HSC30 should be fully opened. Once it is clear that no further sample medium is present and any residual pressure in the sample hose has decayed, the cooling medium should be isolated.



#### Accessories

1. HSV60 Sample Valve
2. Cooling water hose adapters

#### Sterilisation

Prior to testing or at periodic intervals it may be appropriate to sterilise the HSC30 to ensure that product sterility is maintained during testing. To this end, the HSC30 is suitable for autoclaving. Alternatively, a flexible hose with steam trap can be fitted on the sample outlet connection and the unit purged with steam. During such a cycle the HSC30 should be drained of cooling water.