The Medium Pressure Flow Option comprises:
- SPL pressure regulator assembly, rated to 3,000psi
- ¼” Swagelok Stainless Steel connecting ball valve, with 2-way shut-off, straight flow pattern
- Particulate filter unit with 0.5 micron filter
- Custom made modified gas delivery tube holder
- 1 x 150ml knockout cylinder with cooling coil
- Mass flow meter rated to 5,800psi
- Remote electronics unit for mass flow controller including control software, power supply unit, cabling and casing.
- 400 watt Thermoelectric recirculating chiller & associated tubing/connectors
- Associated tubing and connectors

Important Note:
Additional requirements for MPFO: 100% dry compressed air supply with appropriate regulator

The Medium Pressure Flow Option allows users to flow air across a sample under pressure.

Flow rates up to 600ml/min can be set.

Figure 1 shows the external overview of the system.

Calorimeter pressure line set-up (Fig. 2) and System overview close-up is shown (Fig.3).

The system incorporates a particulate filter and cold trap enabling preparation of flue gas for compositional analysis.
Example: Composite Oil Sample

Two tests were run with a composite oil sample, both with around 6g. In Test 1 the sample was under 20.6 bar of pressure and there was a flow out of 10ml/min (air). In Test 2 the sample was also under 20.6 bar but there was no flow.

NOTE: The OSU must be purchased with this option