

## SICRIT® Heated Sampling Line

SICRIT® Heated Sampling Line facilitates sample transport and avoids contamination.



Figure 1 - SICRIT® Heated Sampling Line for use with SICRIT® Ionization Set SC-30.

### Simple. Smart. Flexible.

The SICRIT® Heated Sampling Line is designed to improve the collection and transport of analytes to the MS and allows for countless new ways to bring samples to the MS instrument. The sampling line is directly connected to the SICRIT® Ion Source. It enables the lossless transport of the sample to the MS, avoids condensation of semi volatile compounds and minimizes carry over effects.

- Sample transfer of humid or heated samples can be challenging. Water or semi-volatile compounds may condensate on the way to the MS and lead to contamination of the system. The passivated stainless steel surface of the SICRIT® Heated Sampling Line avoids condensation and memory effects.
- Full flexibility and no space limitation in the analytical lab. Direct screening experiments of bulky samples become possible. With the SICRIT® Heated Sampling Line there is no need to bring the sample directly in front of the MS inlet, instead you can now do remote sampling.
- Monitor processes by means of the gas-tight connection ensuring no interferences from the environmental background. Use the sampling line to create a closed connection with other devices e.g. thermogravimetry instruments or desorption chambers.

Get more flexibility with the SICRIT® Heated Sampling Line!

### Fields of Application

#### • Direct Screening Experiments

The SICRIT® Heated Sampling Line allows direct screening of challenging samples. For example, the direct aroma profiling of hot coffee. Here the hot liquid may condensate on the way in the MS which leads to contamination of the MS inlet and memory effects of especially semi-VOCs. These effects are avoided by the heated transfer line to the MS.



Figure 2 - VOC transfer for brewed coffee headspace analysis.

#### • Monitoring of Processes even with High Humidity

With the SICRIT® Heated Sampling Line it is possible to e.g. directly connect the exhaust line of a coffee roaster to an LC-MS and monitor the aroma components during the roasting process. With high resolution MS you can thereby follow the dynamic evolution of more than 500 VOCs in parallel during roasting (further reading [Coffee Roasting App Note](#)).



Figure 3 - Real-time monitoring of coffee bean roasting.

- **Real Time Flavour Release**

Consumer acceptance and food safety are important concerns for food industry. Rapid sensory analysis, objectivity and low costs per sample are important.

For this purpose, currently costly human sensory panels are used. The SICRIT® Ion Source together with the Heated Sampling Line, which alleviates sample introduction for e.g. olfactory analyses, provide a more cost effective and more objective analysis solution (further reading [Red Wine App Note](#)).

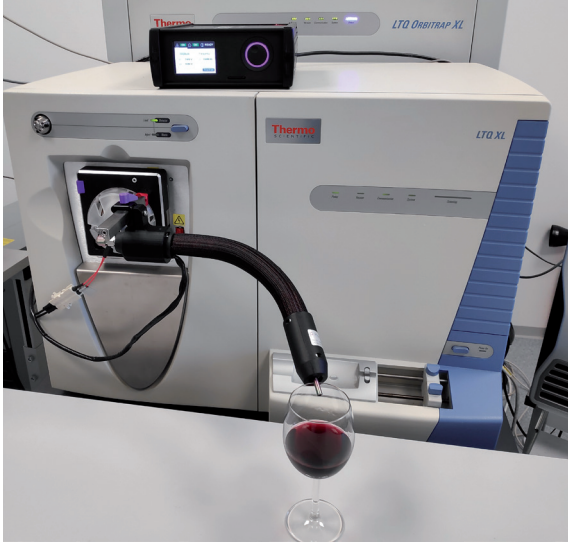


Figure 4 - Sampling for HRMS aroma profiling of red wine.

### Technical Data and Specifications

Dimensions	Ø 40 x 400 mm (other lengths upon request)
Inner Diameter	4 mm
Weight	0.5 kg
Tubing Material	passivated stainless-steel
Supply Voltage	24 VDC supplied by SICRIT® Control Unit SC-30
Temperature Control	controlled by SICRIT® Control Unit SC-30 (firmware version 2.3 required)
Operation Temperature	max. 200 °C
Operation Conditions	15 - 30 °C room temperature < 80% RH (non condensating)