

Product Flyer

AutoSampler

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V&F
Analyse- und
Messtechnik
GmbH

AutoSampler

V&F offers a modified version of the Agilent G1888 Network Headspace Sampler for offline sampling that is fully compatible with the V&F mass spectrometer models. The AutoSampler provides an automated method to run up to 70 samples consecutively without operator attention. The sampler's microprocessor optimizes the time spent for each run according to the values programmed in by the operator. Up to four different methods can be stored and used to analyze a series of samples.

The Headspace Sampler can also do multiple headspace extraction (MHE) using multiple septum punctures, with up to 100 extractions per sample. MHE can also be used to automate optimization routines.



Components

Oven

The oven contains a circular aluminum sample carousel that holds up to twelve 10-mL or 20-mL sample vials. A resistance band heater heats the oven. A motor-driven fan in the center of the carousel circulates the air to maintain constant and uniform temperature. The carousel can shake at two speeds to help components elute into the headspace quicker. Mechanical rods move vials down into the oven and up to the needle for extraction.

Heated zones

There are three heated zones which are the vial oven, the loop, and the transfer line. Each heated zone can be set to a specific temperature or turned off. The vial oven is where the vials heat during thermal and chemical stabilization. The set point temperature range is between 40 °C and 230 °C. At this point, the needle has not pierced the septum. The loop zone controls the temperature of the upper chamber, the valve, and the sample loop. The set point range of the loop is between 45 and 250 °C. The temperature range of the transfer line is 50 to 250 °C.

Vial tray

The 70-sample vial tray is located on top of the unit to the left of the oven. The tray is constructed of a flexible belt with dividers for each vial compartment. The keypad on the front of the Headspace Sampler controls tray rotation to assist filling the tray with headspace vials. The tray can move forward and backward.

Sampling system

The basic components include a deactivated stainless steel vial-sampling probe with an inner diameter of 0.5 mm, six-port valve, deactivated stainless steel valve sample loop, set of two miniature solenoid valves, and deactivated stainless steel tubing.

Transfer line

The transfer line connects the AutoSampler directly to the V&F online mass spectrometer with a capillary gas inlet system. The transfer line is 85 cm long and made of deactivated stainless steel. The transfer line heats to a maximum temperature of 250 °C.

High Operating Comfort

The user can attach the AutoSampler with an Ethernet cable to a standard PC running with Windows XP, 7, 8, etc. that meets the following requirements:

- A standard PC with Ethernet connection
- Microsoft.NET Framework 4.0
- V&F Connect license for the V&F mass spectrometer

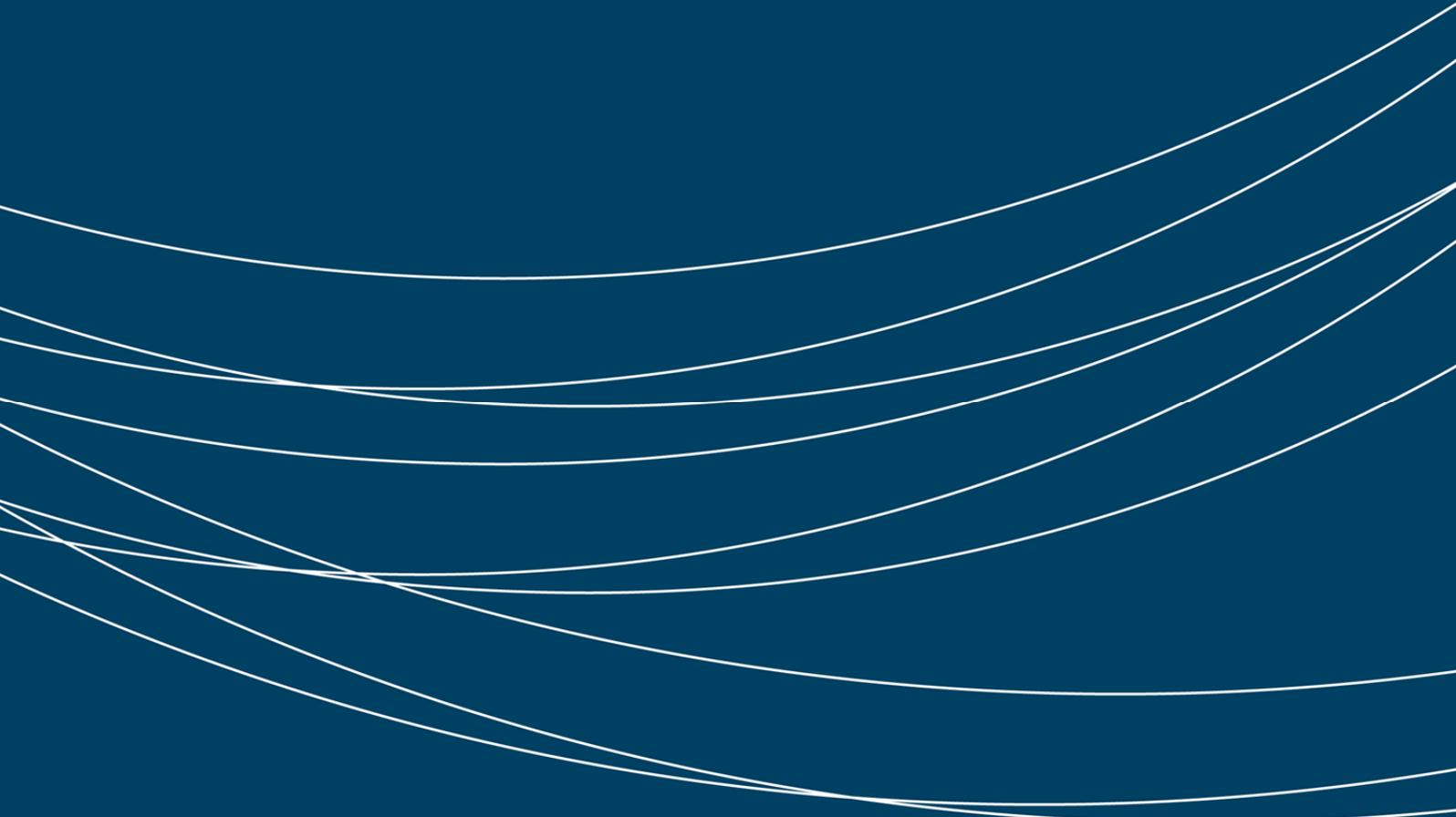
The AutoSampler is fully controlled via a user friendly software package - the V&F Plus program - that has been designed using the highly approved Microsoft.net technology.

Features, Benefits

- robust and reliable
- fully software controlled via a user friendly software package
- minimized service and operation costs

Specification, Technical Data

Technical Data	Value	Technical Data	Value
Transfer line length	850 mm	Ambient temperature	20°C - 35°C
Transfer line temp.	50 to 250 °C	Humidity	max. 80 % (non-condensing)
Loop temperature	45 to 250 °C	Power	230V/50Hz 750 W
Oven temperature	37 to 230 °C	Dimension (WxHxD)	660 x 560 x 480 mm
Max. number of vials	70	Weight	47 kg



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