

EQUIPMENT FOR EMISSION TESTS



CONSTRUCTION, SALE AND
MAINTENANCE

The determination of formaldehyde, VOC and odour emissions from wood materials, building products, or furniture belongs to the long-term core competences of EPH. Besides technical know-how, EPH as an accredited centre for emission testing offers also technical equipment such as emission chambers and gas analysis systems.

The provided systems are characterised by simple operability and a configuration in accordance with the customers requirements at an attractive price. They are used in the wood materials and furniture industries, by producers of binders and coatings as well as in testing institutions.

We would be glad to support your efforts in R&D or FPC by our systems. For completion, we offer the validation of your system by respective comparative tests and training of your laboratory personnel. In addition we offer regular maintenance of these systems.



Emission test preparation

Equipment of factory production control labs

In order to meet the requirements of the European REACH regulation EC 1907/2006 as well as of other regulative and normative specifications, a frequent product control regarding their content of hazardous substances might be necessary. Among them are the so called CMR substances or certain heavy metals which are liable to restrictions. Compliance of products to those restrictions may be part of the factory-own product control or incoming goods inspection. EPH offers services in the framework of laboratory planning for factory product control or incoming goods inspection including purchase of laboratory equipment and testing devices as well as method development and training of personnel.

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Gas analysis device

Derived test method for the determination of formaldehyde emission from wood materials acc. to EN ISO 12460-3 – gas analysis method (former EN 717-2).

System GA-4M.nt/GA-4ME.nt (stainless steel)

- Gas analysis device with double chamber and accessories
- Gas-proof double-wall electropolished test chamber with interior volume of (4000 ± 200) ml
- Regulated tempering of test chamber air at 60 °C (± 0,5 K)
- Regulated air volume flow at (60 ± 3) l/h
- Optional compressed air-independent operation (pump) for free choice of installation location
- Digital data monitoring of temperature, pressure, rel. humidity and air volume flow
- Data output as CSV file
- Individually configurable valve switching 10 pairs of wash bottles incl. equipment for absorption of emitted formaldehyde in aqueous solution
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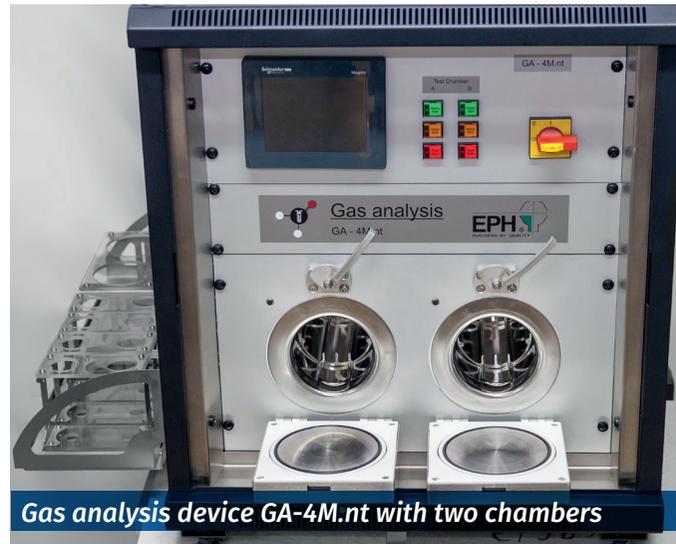
System GA-ES 90 (stainless steel)

- Gas analysis device with double chamber and accessories additional suitable for tests in accordance with ÖNORM M 6219-1: „Anforderungen an öffentliche und gewerbliche Saunananlagen, Infrarotkabinen, Dampf- und sonstige Wärmekammern“
- Gas-proof double-wall electropolished test chamber with interior volume of (4000 ± 200) ml
- Jacket tempering of test chamber air up to 90 °C
- Optional compressed air-independent operation (pump) for free choice of installation location
- Regulated air volume flow at (60 ± 3) l/h
- Digital data monitoring of temperature, pressure, rel. humidity and volume flow

- Data recording and output as CSV file
- Individually configurable valve switching
- 10 pairs of wash bottles incl. equipment for absorption of emitted formaldehyde in aqueous solution

Applications

- Use in factory production control (FPC) for quality assurance
- Accompanying analysis during product development
- For standard testing in test institutions
- Additional use for orienting determination of formaldehyde or VOC emissions under modified test conditions



Emission test chambers

- Determination of formaldehyde emission according to the new requirements of the REACH Regulation (EC) No. 1907/2006, which will come into force in August 2026
- Determination of VOC and formaldehyde emissions in accordance with national and international standards EN 717-1, EN 16516, ISO 12460-1 and 2, ASTM 6007
- Conditioning under defined climatic conditions

System PK-ES (stainless steel)

- Interior volume 100 l/225 l/1,0 m³
- Interior walls electropolished
- Digital monitoring and recording of the test parameters (temperature, rel. humidity, flow velocity, volume flow)
- Automated regulation of test parameters temperature, rel. humidity and air exchange acc. to setpoint input through SPS-touch panel
- Data output as CSV file for further processing e. g. with Microsoft Excel®
- Regulation/Monitoring of the test procedure possible via customer's own intranet/web browser

Requirements for installation location

- Air-conditioned at 18 °C to 20 °C, without direct sunlight
- Compressed air connection with max. 10 bar output pressure
- Observe the ceiling load and sufficient installation space