





12/22-F42

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 chamber 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 relating to 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 planning of laboratories for factory-own product control or incoming goods inspection including purchase laboratory equipment and testing devices, as well as method development and training of personel.

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# Construction, Sale and Maintenance of Equipment for Emission Tests



**Emission tests** 









### **Emission test chambers**

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 I/225 I/1,0 m<sup>3</sup>
- Interior walls electropolished
- Digital monitoring and recording of the test parameters (temperature, rel. humidity, flow velocity, volume flow)
- Automated regulation of test parameters 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

# System PK-GS (glass)

- Interior volume 100 l und 225 l
- Digital monitor and recording of the test parameters temperature and rel. humidity
- Option: volume flow regulation according to customer requirements

# Gas analysis device

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

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

- 2 chamber master device extendable with 2 chamber slave device
- 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
- Digital data monitoring of temperature, pressure, rel. humidity and air volume flow
- Data output as CSV file acc. to customer requirements possible
- Manual of automated valve switching by magnetic valves acc. to customer requirements
- 10 pairs of wash bottles incl. equipment for absorption of emitted formaldehyde in aqueous solution

## System GA-ES 120 (stainless steel)

- Design consisting of one or two test chamber units
- Gas-proof double-wall electropolished test chamber with interior volume of (4000 ± 200) ml
- Jacket tempering of test chamber air up to 120 °C
- Regulated air volume flow at (60 ± 3) I/h
- Digital data monitoring of temperature, pressure, rel. humidity and volume flow; data output as CSV file acc. to customer requirements possible
- Automatic valve switching using magnet valves
- 10 pairs of wash bottles incl. equipment for absorption of emitted formaldehyde in aqueous solution
- Applicable for testing acc. to ÖNORM M 6219-1: "Requirements to public and commercial saunas, infrared cabins, steam and other warm chambers" and other standards if applicable

### **Applications**

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



Gas analysis device with two chambers