

LAB FORMALDEHYDE TESTER

GA300

The GA300 apparatus for the gas analysis test permits a rapid calculation of the amount of formaldehyde released by wood-based panels. Testing is conducted to meet EN ISO 12460-3 standard requirements. The sample, which has been suitably prepared for testing, is placed inside an hermetically sealed chamber at a controlled temperature, pressure and air flow. The formaldehyde released by the sample inside the chamber collects in the controlled flow of hot air that travels through the chamber. The air containing the formaldehyde is passed through wash bottles at outfeed where the formaldehyde recombines with the water. The amount of formaldehyde contained in the water is measured using the photometric method. The result is given in milligrams of formaldehyde per square meter of board surface in one hour (mg/m²h).

The GA300 gas analyser rapidly provides details on the amount of formaldehyde released by the boards produced to enable timely corrections to the production parameters. Since a full test lasts approximately 4 hours, the results will be received around every 2 hours if a two chamber lab tester is used, (with respect to the sample taken during the previous 4 hours). Whereas, in the case of the four chamber tester, the results are received every hour.

BEST IN CLASS FOR:

WOOD BASED PANELS:
PB/SPB
OSB/LSB/FOSB
MDF/HDF

MAIN FEATURES

- Possibility of controlling 2 test chambers with one device (may be expanded to 4 chambers)
- Each chamber is able to control temperature and air flow regulation independently
- Test data may be printed and recorded after the analysis
- The gas collection times and temperature regulation may be configured should any changes be introduced to the standard, or for experimenting purposes
- As well as processing the data for each analysis, the central processor is able to supply the calibration value of the spectrophotometer.



- The **Fast Formaldehyde Analyser** is an optional device that is able to carry out the measurements more rapidly whilst maintaining an excellent correlation with the standard EN ISO 12460-3 method. Thanks to a special probe that combines laser and photoacoustic techniques, the results of formaldehyde levels in the environment are typically obtained between 30 and 60 minutes, with elevated accuracy and without any chemical process. Furthermore, it provides an exceptionally high level of stability, thus requiring low overall maintenance.
- The device can be added to the GA300-2 (two chambers) and the GA300-4 (four chambers).

TECHNICAL DATA

DIMENSIONS OF TESTING CHAMBER	96 x 555 mm
DIMENSIONS OF SAMPLE	50 x 400 mm
HUMIDITY OF AIR	2 ± 1% r.h.
OPERATING TEMPERATURE	60 °C ± 0.5
AIR PRESSURE	Mains pressure
OPERATING OVERPRESSURE	1000 ÷ 1200 Pa
AIR FLOW IN CHAMBER	60 ± 3 l/h
PRODUCTION SAMPLING FREQUENCY	2 test chambers: approx. every two hours 4 test chambers: approx. every hour
INSTALLED POWER	1.3 kW or 2.5 kW