

Gas chromatograph with FID/TCD

Description/Parameters

Gas chromatograph with FID/TCD is a device for separation and analysis of gaseous and liquid samples using thermal conductivity detector (TCD) and flame ionization detector (FID). TCD is used to detect permanent gases such as H₂, N₂, O₂, CO and CO₂. FID is used to detect hydrocarbons, both gaseous and liquid. The gas chromatograph contains both an autosampler for 100 vials of liquid samples and a gas loop for injection of gaseous samples. Appropriate separation of the substances is then carried out based on a suitably chromatography column and oven temperature program.

Utilization/Services

Gas chromatograph with FID/TCD for the analysis of pyrolysis gases and liquid condensates from pyrolysis of biomass as well as plastics.

- Gaseous sample: He, H₂, N₂, O₂, CO, CO₂, CH₄ and light hydrocarbons (C₂-C₄).
- Sensitivity up to 20 ppm, except CO and CO₂ which is around 1-2 vol.%.
- We do not provide determination of sulphur and halogenated organic compounds in gas.
- Liquid hydrocarbons (standards are needed).
- Solvent in accordance with ČSN EN ISO 11890-2.

