

Pyrolyzer

Method of pyrolytic gas chromatography is widely used for analyzing polymeric materials, plastics, rubbers, caouthchouc, paintwork materials and other high molecular compounds of natural and artificial origin. This method is based on thermal decomposition of samples in inert environment (without oxygen access) with further chromatographic separation and analysis of resulting volatile compounds. This way the received pyrogram allows to judge the composition of the initial sample. Pyrolysis is also used during geochemical researches.

Pyrolyzer is an independent item and can be used with any gas chromatographs, including series "Crystallux". Sample pyrolysis in pyrolyzer is carried out in silica capsule during heating to fixed temperature at the speed of over 500°C/min. Switching of sample injection modes and flush of pyrolysis remains from the capsule is performed with the help of 6-step valve. Injection of pyrolysis products into evaporator of the chromatograph is performed with a needle.

Features

- Capsule volume — 56 mcl.
- Pyrolysis temperature — from 200 too 1000 °C.



- Inaccuracy of temperature maintenance — no more than 1,0 °C.
- Sample heating time to pyrolysis temperature — no more than 2 s.
- Capsule cooling time during shifting from hot zone to cold zone after pyrolysis — no more than 10 s.
- Time of continuous work in pyrolysis mode — no more than 60 s.
- Electric power supply with voltage (220) V, frequency (50±1) Hz.
- Power consumption — no more than 100 VA.
- Overall dimensions of control unit (width×depth×height) — 210×190×100 mm.
- Overall dimensions of input node (width×depth×height) — 90×135×160 mm.
- Control unit mass — no more than 2,5 kg.
- Input node mass — no more than 0,9 kg.

