页岩含气性综合分析仪

Combined Shale Gas Content and Composition Analyzer

在对页岩的含气量进行解析测试的同时在线分析页岩气中各气体组分的含量，有效提高页岩含气性测试的效率，保障测试结果的准确性和可靠性。

The real-time content of each chemical component can be simultaneously detected while analyzing the total desorbed gas content of shale, which improves the test efficiency, and makes the data more accurate and reliable.
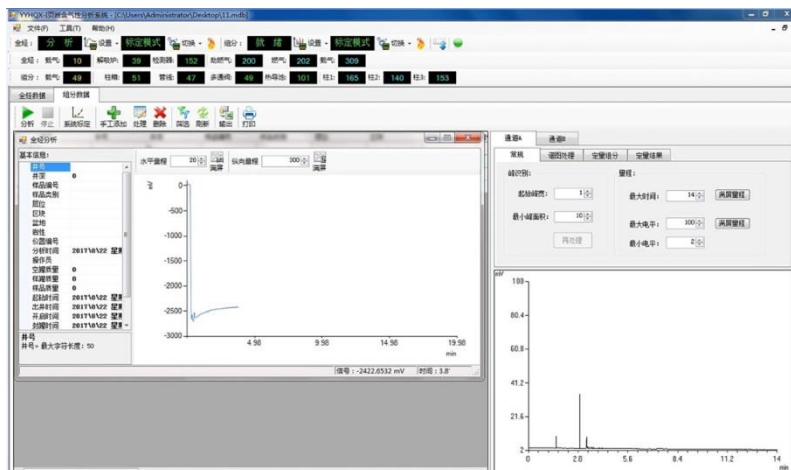
创新点

➢ 采用一体多通阀气路切换系统，可同时进行解析气全烃总量、组分成分分析。

➢ 可以分别选择使用全烃分析或组分分析，也可以同时分析或定时分析。

➢ 可以同时采集多通道数据，计算并提供多点校正或单点计算方式，计算数据更精准。

Highlights

➢ An integrated multiport valve system has been developed to switch different gas paths, which could be used for content analysis of hydrocarbon and component simultaneously.

➢ Either total hydrocarbon analysis or component analysis can be used.The analysis can be conducted simultaneously or regularly.

➢ multi-channel data can be collected and accurately calculated by taking multi-point correction or single point calculation method.

技术指标：

- 检测指标：全烃、甲烷、乙烷、丙烷、异丁烷、正丁烷、异戊烷、正戊烷、氧气、氮气、二氧化碳、一氧化碳
- 柱箱恒温范围：50℃～100℃，精度±1℃
- TCD 恒温范围：100℃～150℃，精度±1℃
- 组分 FID 恒温范围：100℃～150℃，精度±1℃
- 多通阀恒温范围：50℃～100℃，精度±1℃
- 管线恒温范围：50℃～150℃，精度±1℃
- 解析炉恒温范围：35℃～150℃，精度±1℃
- 解析气 FID 恒温范围：100℃～150℃，精度±1℃
- 流量控制精度：±2% FS
- 仪器连续运行时间：不小于 15 天
- 最小检测浓度：甲烷不大于 10ppm；乙烷不大于 10ppm
- 全烃最小检测量（检测限）0.05ml/min

Technical Parameters

- Detection Index: hydrocarbons, methane, ethane, propane, iso-butane, n-butane,iso-pentane, n-pentane, oxygen, nitrogen, carbon dioxide, carbon monoxide
- Thermostatic range of oven: 50℃～100℃, ±1℃
- Thermostatic range of TCD: 100℃～150℃, ±1℃
- Thermostatic range ofcomponentFID: 100℃～150℃, ±1℃
- Thermostatic range ofmultiport valve: 50℃～100℃, ±1℃
- Thermostatic range of pipelines: 50℃～150℃, ±1℃
- Thermostatic range of desorption container: 35℃～150℃, ±1℃
- Thermostatic range of desorbed gas FID: 100℃～150℃, ±1℃
- Accuracy of flow rate: ±2% FS
- Continuous run-time: ≥15 days
- Detection concentration limit: Methane ≤10 ppm; Ethane ≤10 ppm
- Detection limit: 0.05ml/min