

# TGA - 3700

## Thermo Gravimetric Analyser



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

## ►► APPLICATION FIELD

The automatic industrial analyzer is used to automatically measure the moisture, ash and volatile content of coal in batches.

The TGA 3700 dual-furnace industrial analyzer developed by us, fully masters the thermogravimetric analysis technology, can automatically determine the moisture, ash, and volatile content of coal samples in batches. It has the advantages of high automation, accurate results, and easy operation. It can be used in coal, electric power, Metallurgy, scientific research institutions and other industry departments measure the moisture, ash, and volatile content of various coals, and calculate the fixed carbon content, which is especially suitable for power plants, chemical plants and new dry cement plants with large sample volumes.

## ►► Features

- Measure the water, ash, and volatile index of 19 samples. After setting out, no one is on duty. There is no need to replace the crucible or remove the lid of the crucible in the middle.
- The instrument consists of two parts: the volatile matter furnace measures the volatile matter indicators, and the water ash furnace measures the water ash indicators. The test process is fully in line with the national standard method to ensure the accuracy of the results.
- Reasonable structure design adopts a new sample delivery mechanism, no translation device such as a "manipulator", nor two sample delivery rod devices, so the crucible will not drop or break during the transfer process.
- The analysis method is flexible, and the classical method or the fast method can be arbitrarily selected according to user needs.
- The fixed carbon, hydrogen and calorific value can be automatically calculated.
- The imported one-tenths balance is used to ensure accurate weighing and stable test performance. Imported furnace wire and insulation materials are used, which are energy-saving, durable and accurate in temperature control.
- The operation interface is friendly, the balance reading is displayed in an enlarged dialog box, and the balance reading is clear at a glance, which is convenient for the user to accurately control the sample weight.
- The software is powerful, enabling data query, printing, statistics, etc. at any time.

## ►► TECHNICAL PARAMETERS

1. Measuring range: 0 ~100%
  2. Measurement accuracy: meet the requirements of "Industrial Analysis of Coal", "Automatic Instrument Method for Industrial Analysis of Coal"
  3. Temperature control range: room temperature ~1200 °C
  4. Temperature control accuracy: each temperature point:  $\pm 2$  °C
  5. Baseline stability :  $\leq 50$   $\mu\text{g}$  from 50 to 1000°C
  6. Baseline Resolution :  $\leq 1$   $\mu\text{g}$
  7. Baseline Sensitivity :  $\leq 1$   $\mu\text{g}$
  8. Baseline Precision :  $\leq 1$   $\mu\text{g}$
  9. Cooling Type : Forced air cooling ( 1200°C to 100°C in approx < 10 min and 1200°C to 50°C in approx 20 min )
  10. Sensor : Thermocouple
  11. Number of samples: 19
  12. Sample quality:  $1 \pm 0.1\text{g}$ , users can also set by themselves 0.5g ~1.5g
  13. Gas requirements:
    - Oxygen: purity 99.5%, pressure after decompression 0.2MPa (using air compressor, no need for ventilation)
    - Nitrogen: purity 99.5%, pressure 0.2MPa after decompression
    - Pressure reducer: high end 0 ~25MPa; low end 0 ~1.0MPa
  14. Instrument power consumption:  $\leq 9$  kW
  15. Host size (length×width×height):
    - Water ash furnace: 62×58×55cm
    - Volatile matter furnace: 62×58×77cm
  16. Weight:
    - Water ash furnace: 80kg, Volatile furnace: 60kg
- Optional : Purging Gas - Compatible for nitrogen, argon, oxygen, hydrogen.
- Flow rate upto 200 ml

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**HPLC Servicing** :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

**Trainings** :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

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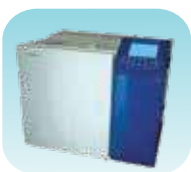
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Water purification  
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Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.



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