

# AAS - 2800

Atomic Absorption Spectrophotometer



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

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

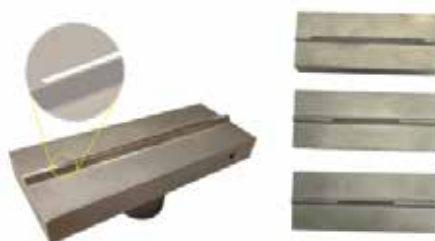
## Introduction :

The core optical platform of the instrument adopts an integral casting structure, with a thickness of 20mm cast aluminum molding and a suspended platform design. The deformation of the casting under high/low temperature thermal effects is within 0.2 mm, so the stability is comprehensively improve.



Aiming at the requirements of multi-element detection tasks, the uniquely designed 8-light position lamp holder is compatible with the light position element memory function of conventional lights, and easily supports 1-4 lights to be preheated at the same time, so that the light source of the instrument is on standby at any time. Ease of use further enhancement

The flame-fog chamber system adapts polyphenylene sulfide, the internal material of the aero-engine, and the overall molding design, which has good material properties such as good flame retardancy, corrosion resistance, high temperature resistance, and high strength, ensuring long-term service life



The industrial TA2 grade high-purity titanium integral casting flame combustion head has excellent corrosion resistance, and the seam surface finish is quasi-mirror by using the slow wire-moving process. At the same time, it supports the expansion of various wide-slit combustion heads, and the analysis of high-salt samples is more convenient

A new generation of flame control system: continuously adjustable and reliable gas circuit control, real-time status breathing light and other designs, equipped with active/passive dual safety interlocking and protection, automatic ignition, and other functions, so that the instrument can work safely and stably in complex environments



The new oxygen-enriched flame technology can be upgraded, and the flame temperature rises to above 2700° C, realizing a high-temperature flame without dangerous chemical laughing gas, and ensuring the determination of high-temperature elements Ca, Al, Ba, Mo, Ti, V, etc

### Parameter :

#### • Light system

- Adopt 8 lamp position design, with automatic rotation/switching/collimation and other functions.
- Support 1 to 4 lamps to light up at the same time, and multiple lamps can be preheated at the same time to improve the analysis efficiency:
- The memory function of each lamp position can be edited freely, without the need to use custom coded lamps

#### • Optical system

- The optical table with integral casting structure is integrally suspended in the main structure of the instrument.
- Classic Czerny-Turner monochromator, grating line density 1800 lines/mm plane diffraction grating
- Spectral bandwidth : 0.1nm , 0.2nm , 0.4nm , 0.8nm , 1.6nm , 2.4nm (automatic switching)
- Automatic peak search setting and scanning, automatic setting of slit width and energy, automatic wavelength optimization and no reset when switching wavelength. High sensitivity, wide spectral range photomultiplier detector.

#### Flame system

- 10cm all-titanium burner for air-acetylene flame.
- Corrosion-resistant material PPS directly forms the atomization chamber, supporting conventional, adjustable, alkali-resistant/organic-resistant and other atomizers for selection
- The flame height is continuously adjustable and has a locking function, which supports 360 free rotation of the combustion seam angle to adjust the sensitivity
- Automatic ignition/flame-off control, high-precision and high-reliability gas flow regulation system
- Standard reading pedal function, easy to read test data

#### Safety protection

- The instrument has complete security protection and dual alarm systems of software and hardware to prevent problems.
- Flame system: Real-time monitoring of flame status, air pressure, ignition failure, gas leakage, abnormal flameout, and other problems. Automatically cut off the gas source and alarm to ensure safety in use.

Equipped with independent active safety protection device: flame emergency flame out protection switch.

- **Other functions**

- Deuterium lamp background correction, 1.0Abs background correction ability > 90 times
- The professional workstation, automatic optimization of instrument status, one-click completion, support for multi-task analysis and automatic switching function
- The number of measurement repetitions is 1-99 times, and the average value, standard deviation, relative standard deviation, etc. are automatically calculated
- Fully automatic fitting of calibration, reset slope, calculation of concentration and sample content, etc., with the function of standard addition method
- Customized information supports custom addition, test data and analysis report printing, and supports output in Word, Excel and other formats

### Extended Functions :

Various specifications of wide-slit combustion heads, adjustable nebulizers, alkali-resistant/organic-resistant nebulizers, etc. are selected, and the analysis of various samples such as high salt samples, organic samples. The alkaline samples are more reliable and effectively reduces crystallization, clogging, corrosion, and pollution.



Optional autosampler, adopting 71-position sub-master plate patented technology, can quickly remove/install standard solution cup and sample cup respectively. The single cup volume > 20mL, self-calibrating sampling position, automatic large flow multi-stage cleaning and other functions, high ease of use.



Optional audit trail software, with electronic signature function, supports user multi-level authority management, protects data security, realizes traceability of analysis process, and fully complies with GMP-related quality management and audit trail requirements.



Oxygen-enriched-air-acetylene high-temperature flame is selected, and there is no dangerous gas-N<sub>2</sub>O, which ensures that the detection limit of high-temperature elements such as aluminum, barium, chromium, molybdenum, and vanadium is effectively improved, and at the same time it brings a jump in analytical sensitivity.

Optional hydride generator for hydrogenation analysis to achieve effective expansion of element types, analytical performance and detection limits such as arsenic, mercury, and selenium.



## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**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.

**AMC's/CMC** :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

**Instruments** :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



## About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

## Our Products & Technologies



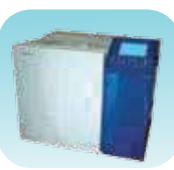
UV/VIS  
Spectro 2080+  
Double Beam



Infra FTIR



Optima Gas  
Chromatograph  
3007



Optima Gas  
Chromatograph  
2979 Plus



Flash  
Chromatograph



Atomic Absorption  
Spectrophotometer



Liquid Particle  
Counter



Optical Emission  
Spectrophotometer



DSC/TGA



Semi Auto Bio  
Chemistry Analyzer



HEMA 2062  
Hematology  
Analyzer



Micro Plate  
Reader/Washer



URINOVA 2800  
Urine Analyzer



Total Organic  
Carbon 3800



Fully Automated  
CLIA



NOVA-2100  
Chemistry Analyzer



PCR/Gradient PCR/  
RTPCR



TOC  
Analyzer



Laser Particle  
Size Analyzer



Ion Chromatograph



Water purification  
system

## Regulatory compliances



## Corporate Social Responsibility

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



1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at [Info@analyticalfoundation.org](mailto:Info@analyticalfoundation.org)

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.

## Reach us @



Note : Company reserves rights to add/delete/modify the contents / technical specifications of the catalogue without prior notice.

**HPLC Solutions   MultipleLabs   Analytical Bio-Med   Analytical Distributors   Analytical Foundation (Trust)**

**Corporate & Regd. Office:**  
Analytical House, # E67 & E68,  
Ravi Park, Vasna Road, Baroda,  
Gujarat 390 015. INDIA

T: +91 265 2253620  
+91 265 2252839  
+91 265 2252370  
F: +91 265 2254395

E: [info@hplctechnologies.com](mailto:info@hplctechnologies.com)  
[info@multiplelabs.com](mailto:info@multiplelabs.com)  
[info@analyticalgroup.net](mailto:info@analyticalgroup.net)  
[info@analyticalbiomed.com](mailto:info@analyticalbiomed.com)

W. [www.analyticalgroup.net](http://www.analyticalgroup.net)  
[www.hplctechnologies.com](http://www.hplctechnologies.com)  
[www.multiplelabs.com](http://www.multiplelabs.com)  
[www.ais-india.com](http://www.ais-india.com)

Sales & Support Offices:  
across the country :  
Distributors & Channel  
partners World Wide