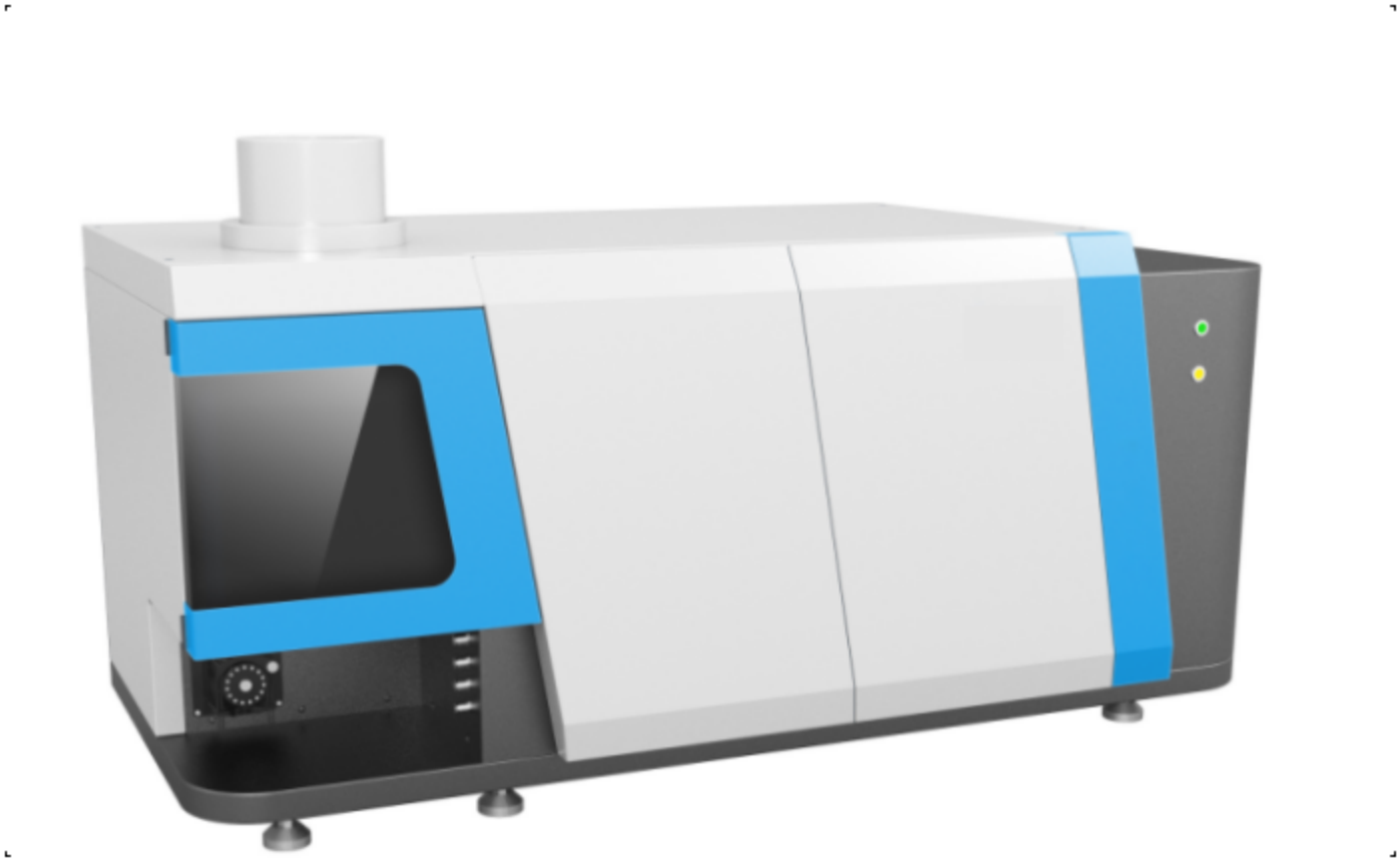
KASON-TY9900 ICP-AES Inductively Coupled Plasma Emission Spectrometers



(Picture just for reference)

1. Summary

1.1Multi-element simultaneous testing:All elements can betested at the same time with one injection,and the results can be obtained at one time.

1.2Fast analyzing speed:about 5 elements per minute,up to 10 elements per minute.

1.3Low detection limit:the detection limit for most elements in solution samples is up to ppb level

1.4Wide linear range:up to 5-6 orders of magnitude,allowing simultaneous testing of high and low content.

1.5 Less chemical interference:basically no chemical Interference,real-time background deduction,more accurate test results.

2.Introduction

TY9900 ICP-AES Inductively Coupled Plasma Emission Spectrometer is widely used in various fields of analytical technology,with a variety of uses,the main application areas:petrochemical,precious metals,rare earths,environmental protection,geology and mining,education and research,metallurgy,and other fields.

2.1Petrochemical industry:the technology can be used for quality control and process monitoring of petrochemical products,such as detecting the content of impurity elements in chemical raw materials.

2.2.Precious metal identification:can be used to detect precious metal components in jewelry,such as gold,silver,platinum,etc.,in order to identify the authenticity and determine the purity.

2.3 Rare earth field:it can determine the content of rare earth elements (such as determining the content of neodymium,praseodymium,samarium,gadolinium, dysprosium,europium,lanthanum,erbium,eight common rare earth elements in rare earth permanent magnet),analyze the impurities of rare earths,and study the high purity of yttrium oxide.

2.4.Environmental protection:it can detect various pollutants in water,soil and air,such as heavy metals,trace elements,etc.,to help assess the degree of environmental pollution and monitor the effect of governance.

2.5.Geology and Mining:In geological exploration and mineral resources development,TY9900 ICP-AES is used to analyze the elemental composition of ores to determine the grade and composition of ores.

2.6.Food and agricultural products:TY9900 ICP-AES can detect nutrients, harmful elements and pesticide residues in food and agricultural products to ensure food safety and quality.

2.7.Life science:In biomedical research,it can analyze the element content in biological samples,such as blood and tissues,to support disease diagnosis and medical research.

2.8.Material Science:TY9900 ICP-AES helps to research and develop new materials and analyze the composition and properties of materials to optimize material design and manufacturing processes.

2.9.Metallurgy:TY9900 ICP-AES can be used to detect and analyze the content of various metallic elements,including steel,non-ferrous metals, alloys,and more.This is important for materials quality control,recycling and environmental monitoring.

3.Feature

3.1Stable and advanced all-solid-state RF power supply

The instrument adopts self-developed all-solid-state RF power supply,which has many advantages such as small size,high efficiency,stable output power,and various protection functions,further improving the stability and safety of the instrument.

3.2Powerful graphical diagnostic function

Powerful graphic diagnostic function can help customers fully understand the current working status of the instrument,and observe the operation of the instrument under different conditions through appropriate parameter settings to select the best measurement conditions.

3.3Fast and accurate fully automatic matching function

The load terminal adopts self-developed full-automatic matching technology,which has the advantages of fast matching speed, high accuracy,etc.It ensures that the output power is added to the load to the maximum extent,and improves the efficiency of the power supply.

3.4Powerful database management

With thousands of spectral lines,you can select the appropriate spectral lines according to your needs,avoiding possible

interference and providing you with more choices,and the open software database allows you to add the spectral line library independently.

3.5Fully automated design

High degree of automation,the whole instrument except the power switch,all functions of the instrument are controlled by computer,reliable,safe and convenient.It can be equipped with optional auto sampler to realize unmanned operation.

3.6Advanced Sampling System

Sampling system is highly efficient and stable,equipped with concentric circle high-efficiency atomizer Plus patented technology double-cylinder fog chamber,can be optional high salt atomizer,hydrofluoric acid atomizer,etc.,to meet the needs of different customers.

3.7 Total reflection achromatic optical system

Adopting concave reflector instead of convex lens as the optical focusing element solves the problem of chromatic aberration caused by different elements with ifferent focuses,and improves the efficiency of the optical system at the same time.

3.8 Automation of Observation Height Adjustment

Different elements have different optimal observation heights,and the flame observation height is adjusted by software to get the best measurement effect at the optimal position.

3.9 Stabilized Waste Liquid Removal System

Peristaltic pump for waste liquid elimination,to ensure that the injection volume and the waste liquid elimination speed is consistent,the customer can adjust the speed according to the need to ensure the stability of the injection system.

3.10 Intelligent and easy-to-operate software

The software can be fully automatic one-key ignition,all the parameter setting changes,are automatically completed.With the advanced automatic matching technology,the ignition success rate is high and the operation is easy.

3.11 Ultra-low cost of use

Instrument non-working state instrument power supply,cooling water tank,gas all closed,does not produce any cost,the instrument works that is open and ready to use,without the need for a long time to warm up the optical path.The purity of argon gas is 99.99%,saving at least one-third of the cost.

3.12 Automatic gas flow control

Sampling system,carrier gas,plasma gas,auxiliary gas all use advanced mass flow controller(MFC)to control,with continuously adjustable flow.Stable flow rate and other advantages to ensure the stability of the sampling system,for the stability of the light source provides a strong guarantee.

Plasma ignition is fully automatic control

Torch tube and atomizer

4.Parameter

4.1Main technical parameters

Observation system:bench-top,plasma vertical observation system

Precision:2ppm mixed multi-element solution,RSD≤1.5%

Stability:2 hours RSD≤2.0%

Detection limit meets the requirements of national standard grade A

Flame Adjustment:Plasma flame can be adjusted in three dimensions: front and back,up and down,left and right (controlled by computer)

4.2 Sampling system

Torch tube:one-piece quartz torch tube

Atomizer:High-efficiency concentric atomizer,sampling rate of 2ml/min

Spray chamber:patented lengthened spray chamber,optional cyclone spray chamber,hydrofluoric acid-resistant spray chamber

Body feeding system,real-time observation of the sample feeding situation

Mass flow controller to control the flow of argon,gas flow continuously adjustable,real-time feedback values

Peristaltic pump fully automated five-channel sixteen roller,continuously adjustable speed

4.3ptical system

Optical stability:designed on a platform with the sample feeding system

System type:Czerny-Turner type (C-T type)with a focal length of 1000mm.

Optical system thermostat,temperature stability:±0.1 ℃

Scanning motor minimum step:≤0.0004nm

Discriminatory rate (Mn257.610nm):≤0.005nm(4320 scale);≤0.008nm (3600 scale);≤0.015nm (3600 scale);≤0.008nm

(3600 scale);≤0.008nm (3600 scale).

≤0.015nm(2400 scale).

Wavelength range:190-460nm (4320 scale);190-500nm(3600 scale); ≤ 0.015nm(2400 scale). 130-900nm(2400 line grating).

Optimal test conditions for different elements can be set

19 YEARS

Professional focused on testing equipment

KASON is established in 2003,owns more than 8000 square meters factory.has a professional sales teams, modem enter prise technology center,scientific and technological research and development team.

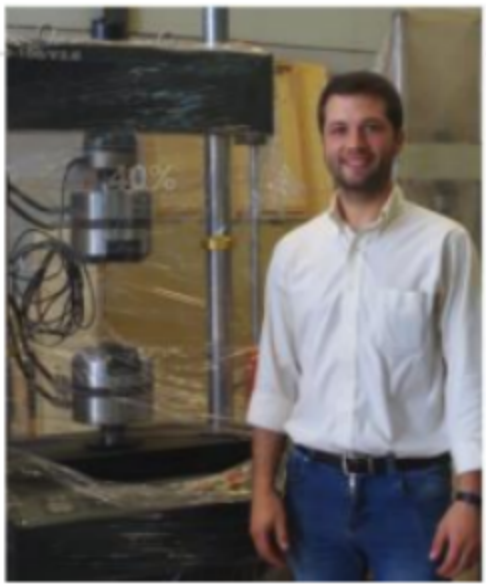
Machines passed the European CE authentication,American FDA certificate and and ISO 9001.

Products sold to USA, Canada, Australia, Europe, Africa etc,more than 130 countries and supply OEM service for many customers

PROFESSIONAL TEAM

KASON has a professional sales teams, modem enter prise technology center,scientific and technological research and development team.

OUR CUSTOMERS (more than 130 countries)



OUR CERTIFICATE (CE / ISO / SGS)

UDEM

MACHINERY DIRECTIVE
ATIESTATION OF CONFORMITY

Technical file of the company mentioned below has been inspected and audit has been completed successfully.

2006/42/EC Machinery Directive Annex VII has been taken as references for these processes.

Company Name	: **Jinan Kason Testing Equipment Co., ltd.**
Company Address	: No.4715, Jingshi West Road, Huaiyin District, Jinan, Shandong, China
Related Directives and Annex	: **2006/42/EC Machinery Directive/Annex VII**
Related Standards	: **EN ISO 12100:2010; EN 60204-1:2018**
Product Name	: **Testing Machine**
Repot No and Date	: TCF-JKTE230605-MD
Product Brand/Model/Type	: WDS-1, WDS-2, WDS-3, WDS-5, WDS-10, WDS-20, WDS-30, WDS-50, WDS- 100, WDS-200, WDS-300, WDW-1E, WDW-2E, WDW-3E, WDW-5E, WDW- 10E, WDW-20E, WDW-30E, WDW-50E, WDW-100E, WDW-200E, WDW- 300E, WDW-500E, WDW-600E, WDW-1000E, EM101, EM202, EM303, EM503, EM104, EM204, EM304, EM504, EM105, WE-30ID, WE-60ID, WE- 100ID, WE-200ID, WE-300ID, HUT305S, HUT505S, HUT1005S, HUT1205S, WDS- 30ID, WEW-60ID, WDS-100ID, WEW-1200D, WEW-2000D, WEW-3000D, HUT305E, HUT505E, HUT10GE, HUT120E, HUT-A200E, HUT-A350E, WAW- 300D, WAW-600D, WAW-1000D, WAW-1200E, WAW-2500E, WAW-3000, WAW-2000A, WAW-3000A, WAW-4900A, HUT-A2000P, HUT-A5000P, HUT- A4000M, HUT2020P, HUT6020M, HUT1020M, HUT1200M, WAL, LAW, HUT-L, 3E- 300, 3E-300E, 3E-500E, 3E- 500L, 3E5- 501, 3E5-500, 3BW- 500, 3BW- 300, 3BDW-300, 3BDW-500, CXP-50, YUEN, YS-1K, DWC- 60, DWC- 80, DWC- 100, DWC- 200, YES-300H, YES-500H, YES-1000H, YES-3000, YAW-1000, YAW-300, YAW-3000, YAW-5000, YAW-9000, NDS- 2000, NDS-900, NDS-1400, NDS-2000, NDW-200, NDW-600, NDW- 1000, NDW-2000, NDW-3000, WDW-5000, WDW-10000, HZ-1, HZ-3, HZ-10, PAT-10, TCS, TSH, WHS, PLS-20, PLS-50, PLS-100, PLS-300, PLS-500, PLS-1000, KASON-1, RDJ-10, RDJ-20, RDJ-50, RDJ-100, DWTI- 20000, DWTI-30000, DWTI-40000, DWTI-50000, DWTI-80000, DWTI- 100000, PF-302, PF-10254, PF-502, PF-502M, PF-302T, PF-502T, PF-302SE, PF-302TW, PF-502W, PF-502TW, PFD302CW, PFD502CW, PFD752CW, PFD1002CW, PFD502CT, PFD752CT, PFD1002CW, PFD302CT, PFD452CW, PFD452CT, PFD752CW, PFD752CT, PFD1002CW, PFD1002CT, PFD452CW, PFD452CT, PFD752CW, PFD752CT, PFD1002G, HCT106, HCT206, HCT506, RSCT04, HY1, HBZ-3, HBZ- 5, HBZ-10, HBZ-20, RSBT-10, KASON 370.02, KASON 370.05, KASON 370.10, KASON 370.25, KASON 370.50, MMW, GBW-60B, GBS-60B, HUT, HTM, XNR, GW-40, GW-50, MBS, NMU, MBH, GBW, GW, LSH, HBT, GLY, GCI-1000, GWQ-1000, GNF-1000, GQR-1000, GJR-300, GSS-1000, GMS-100, GTW-500, GQC-5, GQG- 100, HR-150A, HRD-150, HRS-150, XHR, HR, HV5, HV, HBRV, W-20, HBA-1, UHT, Q-5A, MP-2, KQ-2B, KD-30M, 40C-E, 48B, JSC-MOPAG, MPI, P, MF, BG, LRG-5E, MFI-35, Q-Z, Q-100B, SQ, Q-3A, QG-4, LSQ, LDQ, GTQ-5000A, GTQ-5000B, DXQ, ZXQ, 48C, HST, KASON, KS, KSCUT, HJR, HPR, HTB, HSTR-45S, HTV, HTMV, HTBRV, MSTRP8035, MPJ
Certificate Number	: **M.2023.206.C86313**
Initial Assessment Date	: 07.06.2023
Registration Date	: 08.06.2023
Reissue Date/No	: -
Expiry Date	: **07.06.2028**

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CSHCC
中标华信(北京)认证中心
CSHCC.CN

Authentication Certificate of Quality Management System

Registration No.19922Q01072R0S

This is to certify that

Jinan Kason Testing Equipment Co., Ltd.

Unified Social Credit Code: 91370104589949393X0
Registered/Production Address: No. 4715, Jingshi West Road, Huaiyin District, Jinan City, Shandong Province
Office Address: Room 2-1108, Harmony Square, Huaiyin District, Jinan City

Is in conformity with :

GB/T 19001-2016/ISO 9001:2015

The certificate is valid for the following scope :
Assembly and sales of testing machines

This certificate should be used effectively with the legal requirements of the administrative license, qualification license, compulsory certification, which the certification scope involved. In the case that the organization regularly receives surveillance assessments, the certificate shall be valid when used together with the Quick Response Code.

Date of Issue: 2022-07-19
Date of Expiry: 2025-07-18
Date of Initial Certification: 2022-07-19

General Manager

IAF MUTUAL RECOGNITION ARRANGEMENT
CNAS 中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C182-M

China Standard Huaxin (Beijing) Certification Center Co.,Ltd.

Address of Certification Authority: 5 Floor,Yinjian Building,No.3 Shijingshan Road,Shijingshan District,Beijing Tel: 010-68575566 P.C.: 100049
Note: The detailed information is available on the Certification and Accreditation Administration of the People's Republic of China official website (www.cnca.gov.cn) the authority's website(www.cnhcc.cn) and the Quick Response Code on the left.

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