

YK-3268AA atomic absorption spectrophotometer, according to the effect of the ground state of the substance, sensitive and reliable determination of trace or trace elements.

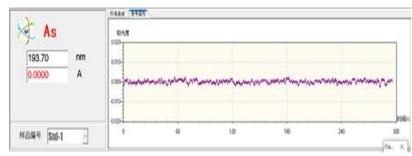


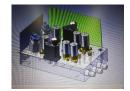
main features:

> Excellent fully reflection optical system ensures that the instrument has excellent signal to noise ratio

The atomic absorption spectrometer adopts the unique design of full reflection full band chromatic optical system and full band energy automatic linear balance to ensure the unity and optimal optical position of the sample channel and reference channel at different wavelengths. Keep the beam imaging and SNR at an optimal level to ensure the accuracy and reliability of the measurement results. All optical components use special processing process is the whole optical system has good reflection efficiency in the deep ultraviolet zone, so that the instrument has a unique excellent signal-to-noise ratio in the full wavelength range.

Figure: AS edge energy





> Fully safe intelligent gas control module

Adopt modular concept, using integrated air island design and independent microcontroller control. Intelligent 32 grade acetylene gas linear flow regulation and multistage auxiliary air regulation control module; and has intelligent gas abnormal alarm and disconnection function. The safety tank design under the acetylene-air module increases the safety of the flame. Abnormal pressure monitor: the air pressure monitor can detect the change of air pressure at any time during the air-acetylene flame analysis. Once abnormal occurs, it will automatically cut off the acetylene gas and turn out safely. Safety measures of graphite furnace: cooling water flow of graphite furnace, protective gas pressure, furnace body

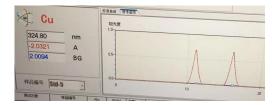


temperature, automatic protection and alarm of graphite pipe installation.



Excellent full-band deuterium lamp background correction technique and high-performance self-priming double background correction

The instrument has two background buckle modes of deuterium lamp and self-priming effect. The special automatic optical balance technology broadens the wavelength application range of deuterium lamp background correction. When the background absorbs 1A, the full wavelength light energy automatic balance and photoelectric signal automatic gain double balance technology can obtain more than 40 times, self-priming effect buckle background 80 times of excellent performance!



Fully automatic instrument control, light source support high-performance element lamp, one key fast completion

Automatic peak finding, automatically set the spectrum bandwidth, lamp current, negative high voltage, lamp position, automatic energy balance, two beams of light energy automatic balance. The light source supports

The original lamp frame 360 degrees rotation design

The unique automatic 8-lamp system can fully adjust the position of the hollow cathode lamp with the unique design to achieve 360-degree rotation, which completely avoids the instrument failure, and improves the reliability of the

Design of novel atomizers and intelligent lift and fall

The unique designed full titanium burner and atomization system make the temperature equilibrium speed and smooth combustion. The atomizer can rise and fall automatically to high-performance element lamp; the wavelength, spectral bandwidth, lamp current, negative high voltage, energy balance.

instrument.





achieve maximum sensitivity.

> MS Window Simple, professional, automatic and fully operated WinAAS workstation software

Rich application experience and professional development technology make the WinAAS operating system not only show excellent professional ability, but also show the humanized and practical characteristics of rich information but clear and understandable, complete functions but easy to use. No professional training that makes you an immediate expert in atomic absorption analysis. From the standard and sample setting, instrument conditions, sample measurement to the output, have experts for your real-time guidance, data output and save conform to the GLP standard, at the same time in the achievement of data, graphics sharing provide text, tables, graphic preservation and curve data export, provide a variety of information support for experimental researchers. If you are the tester, the function you want in the test can be reflected in the WinAAS software.

QA / QC function: Each test with Abs. SD, RSD, while providing the calculated concentration of SD, RSD, test standard sample working curve is automatically check the curve correlation coefficient to ensure the accuracy of the test.

Full information measurement: The results of different data processing methods (average, peak height, peak area and statistical results) are saved for users to study the results. Workstation software can meet the different needs of various users, save and output a variety of data and graphics data, support data



processing.

Six correction equations: Six linear and nonlinear concentration calibration methods are provided to ensure the accuracy and stability of the analysis results.

Hork software has a rich expert system information database

One key to quickly complete the wavelength, spectral bandwidth, lamp current, negative high voltage, energy balance and other Settings.

The three atomized heating methods of graphite furnace system (general heating, light-controlled high power heating and spatial and temporal high power heating) increase the selectivity and practicability of the atomized temperature conditions.

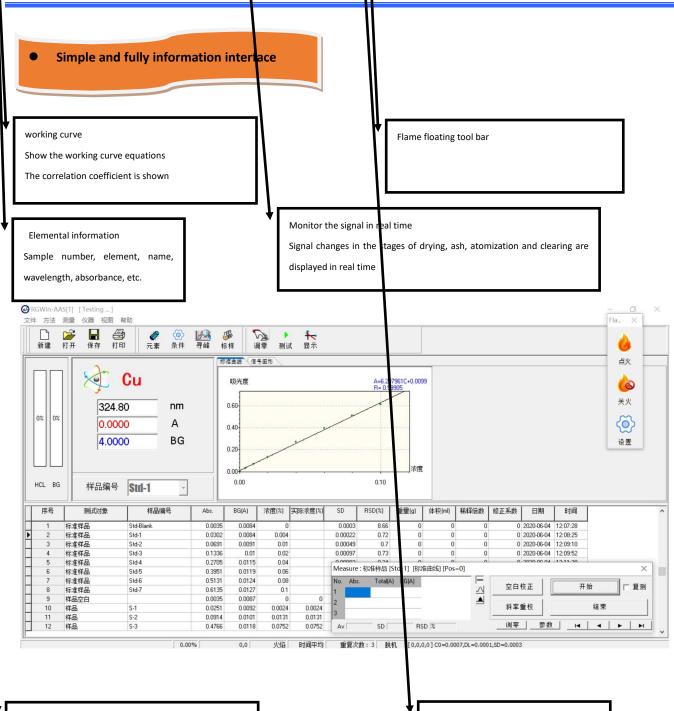
Unique strong antigenarizer (including graphite furnace and flame) light radiation interference ability;

Appearance design of excellent instruments;

4 Advanced functional module design and manufacturing process design make the instrument have good reliability.



Simple and full-information of the WinAAS workstation software



Each element analysis result work order

Sample number, absorbance, background signal, concentration calculated by working curve, actual concentration, etc.

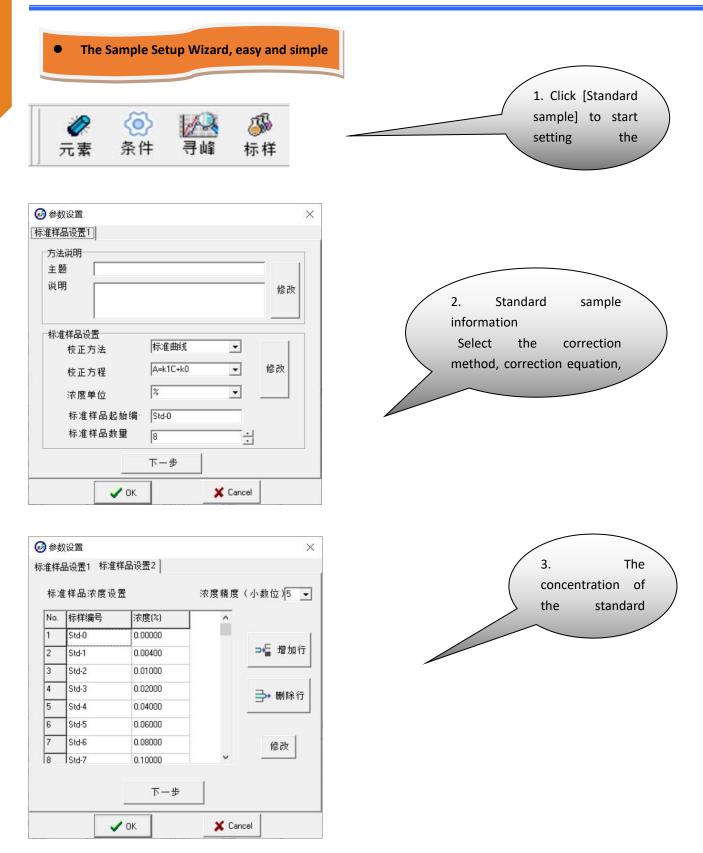
Test command

Press the [Start] key, and

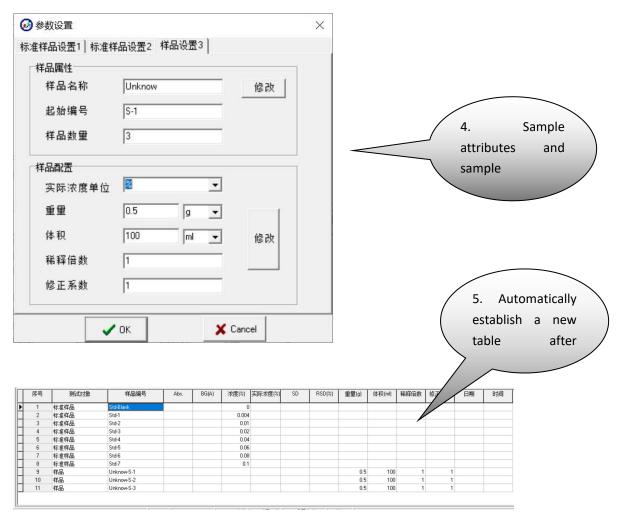
everything starts automatically

Free to do [blank] [reset] work

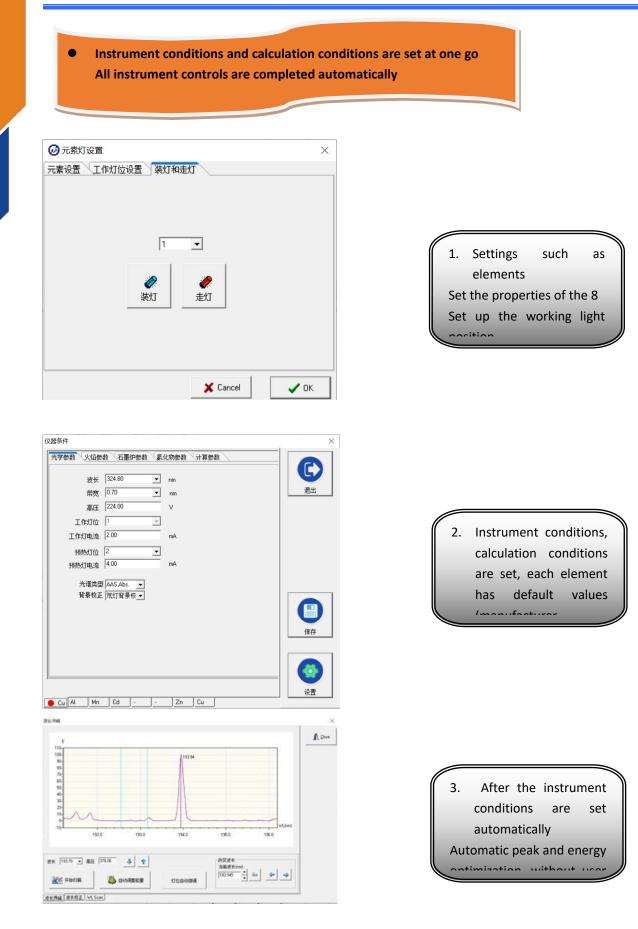








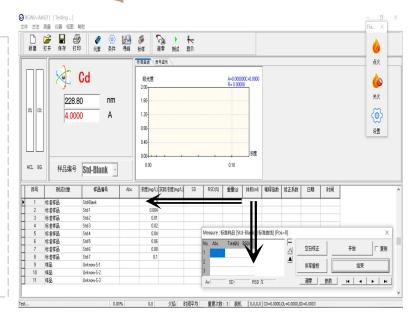






Full information measurement

- The results of different data processing methods (average, peak height, peak area and statistical results) are saved for the user to study the results. YK software can meet the different needs of various users, save and output a variety of data and graphics data, and support data processing.
- 2. Switching of calculation mode: just click the average, peak height, peak area mode button, that is, automatically update the information in the data table (Abs, SD, RSD), working curve (figure, equation, correlation coefficient), recalculate concentration, etc., to provide comparative data for researchers.



Excellent data-processing capabilities

Contains 6 kinds of correction curve fitting mode (linear and non-linear), the standard points can be up to 30, to the maximum extent to meet the needs of user data correction

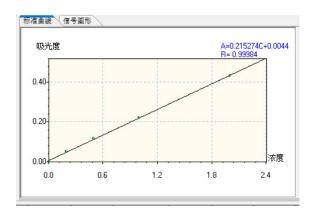


Figure: Measurement calibration curve of Cu _ low concentration solution



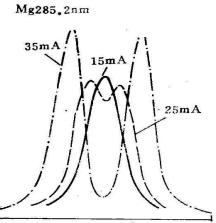


High-performance self-priming background correction

Introduction to the high-performance self-priming background correction

1. Self-priming background correction principle:

The method of self-priming at the high current of the sample beam and low current in the same HCL lamp, as shown in Fig.



2. Comparison of several commonly used background correction methods

					CAN M SHELER SA SHE	1cm ⁻¹
		Deuterium	-	The man method		High-perfor
		lamp	Constant	Cross	Constant	mance
0	mpare the content	method	magnetic	change	Crosschange	self-priming
			(horizontal)	(horizontal)	(longitudinal)	method
	Two beam consistency	difference	good	good	good	good
instal	Light operay helence	balance	Basic balance	Basic	Basic balance	out-off-bala
lation	Light energy balance	Dalance	Basic Daidrice	balance	Basic Dalance	nce
		1		The loss is		free of
	energy utilization	loss	The loss is big	big	Loss is small	losses
	The wavelength		Full	Full	Full	Full
	range was corrected	ultraviolet	wavelength	wavelength	wavelength	wavelength
	Loss of sensitivity	Basic no	big	Have a loss	Have a loss	more
		leave much				
	Baseline stability	to be	good	good	good	preferably
		desired				
functi	1A background	good	good	good	good	good
on	2A background	difference	good	good	good	preferably
	Button structure background	cannot	approve	approve	approve	approve
	Spectral line overlap	cannot	Part of the	Part of the	Part of the	With Zeman
	interference	cannot	buckle	buckle	buckle	With Zeman
	Curve flip (double	not have	More serious	More	More serious	nothing
	value)			serious		serious
prime cost		low	tall	tall	tall	Very low

3. Advantages of the high-performance self-priming method

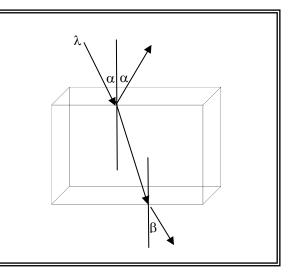
Self-priming background correction ability:

Background absorption of 1A, the background deduction capacity of more than 80 times, for the domestic leading!



Full-band deuterium lamp background correction technology, a unique full-reflection optical system

The unique fully reflection optical system ensures the uniqueness of light transmission, so that the hollow cathode lamp and deuterium light beam under different elements and different wavelengths can overlap to the best, without the need to readjust the two light paths. Instead of the full reflection optical system, due to the addition of lenses, the optical physical channels at different wavelengths change, breaking the physical balance of the hollow cathode light and the deuterium light beam.



The optical balance technology of hollow cathode lamp and deuterium light beam realizes the full band deuterium lamp background deduction, broadening the application range of deuterium lamp and background. At the same time, the full reflection strong light path and perfect data processing technology achieve the strong background correction ability.

Deuterium lamp background correction specialty: Background correction ability was performed> 40-fold Background corrected wavelength range: 190-900 nm



		Atomic absorption spectrophotometer-flame method
nodel	Instrument	YK -3204AA
	Instrument type	single beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
optics	wavelength coverage (nm)	190-900nnm
system	The wavelength indicated the error	0.3 nm
	Wavelength repeatability (nm)	≤0.1nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	4 Light
	Elemental lamp type	Ordinary element lamp
	Read the way	transmittance, absorbance, concentration
	Light range	0-125%, -0.1-3.00A
	Cu static baseline drift	±0.004A/30min
tric performa	The Cu dynamic baseline drift	±0.006A/15min
nce	background correction	Deuterium lamp background correction power> =30 x (1 Abs)
	characteristic concentration (Cu)	≤0.04ug/ml
	detection limit (Cu)	≤0.008ug/ml
	repetitiveness	RSD≤1%
flame	Acetylene flow regulation	Automatic 12 gear
analysis	Air-assisted air conditioning	Automatic 4 gear
	Burner lift	Automatic lifting
	burner	Metal titanium burner
	sprayer	High-efficiency glass atomizer
	atomizer chamber	Aatomization chamber of corrosion resistant materials
	safety precautions	Abnormal pressure protection of flame gas and combustion-supporting gas
data handling	Measurement method	Flame method, hydride generation-atomic absorption method, flame emission method
	Concentration calculation method	Standard curve method (6 linear, nonlinear fitting methods), standard addition method, interpolation method
		1-30 times, calculate and give the mean, standard deviation and relative standard deviation of the absorbance and concentration



	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
else	Mass (weight) of kg	90Кg
	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
	end-use temperature	10 ℃ 30 ℃
	Use humidity	40% 85%

		Atomic absorption spectrophotometer-flame method
model	Instrument	YK -3208AA
	Instrument type	single beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
optical	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
system	wavelength coverage (nm)	190-900nnm
	The wavelength indicated the error	0.2 nm
	Wavelength repeatability (nm)	≤0.1nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	8 The lamp
	Elemental lamp type	Ordinary element lamp
	Read the way	transmittance, absorbance, concentration
	Light range	0-125%, -0.1-3.00A
	Cu static baseline drift	±0.003A/30min
tric performa	The Cu dynamic baseline drift	±0.005A/15min
nce	background correction	Deuterium lamp> =40 x (1 Abs)
	characteristic concentration (Cu)	≤0.035ug/ml
	detection limit (Cu)	≤0.006ug/ml
	repetitiveness	RSD≤0.6%
flame	Acetylene flow regulation	Automatic 12 gear
analysis	Air-assisted air conditioning	Automatic 4 gear
	Burner lift	Automatic lifting
	burner	Metal titanium burner
	sprayer	High-efficiency glass atomizer
	atomizer chamber	
	safety precautions	compussion-supporting gas
data handling	Measurement method	Flame method, hydride generation-atomic absorption method, flame emission method
	Concentration calculation method	Standard curve method (6 linear, nonlinear fitting methods), standard addition method, interpolation method
	Number of repeated measurements	1-30 times, calculate and give the mean, standard deviation and relative standard deviation of the absorbance and concentration



	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
else	Mass (weight) of kg	90Kg
eise	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
	end-use temperature	10 °C 30 °C
	Use humidity	40% 85%
1		

		Atomic absorption spectrophotometer-graphite furnace method
Instrur	ment model	YK -3224AA
	Instrument type	single beam
	monochromator	C-T, 350mm
optical	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
system	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
	wavelength coverage (nm)	190-900
	The wavelength indicated the error	0.3 nm
	Wavelength repeatability (nm)	≤0.1nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	4 Light
	Elemental lamp type	Ordinary element lamp
	Read the way	transmittance, absorbance, concentration
	Light range	0-125%, -0.1-3.00A
Photometric	Cu static baseline drift	±0.004A/30min
	The Cu dynamic baseline drift	±0.006A/15min
	background correction	Deuterium lamp background correction power> =30 x (1 Abs)



	Feature quantity	The Cd feature amount is 0.9 pg A Cu feature quantity of 20 pg
	detection limit	The Cd detection limit was 1.5 pg The detection limit of Cu was 25 pg
	repetitiveness (Cd)	RSD≤4%
Graphite furnace analysis	Graphite furnace heating range	Room temperature of ~ 3,000 $^\circ \!$
anarysis	High-power heating range	1500℃~3000℃
	Slping with hold time	1s~255s
	heating rate	The maximum heating rate is 2000 $^\circ\!\mathrm{C}$ / s
	Atomized heating mode	Light control heating, time control heating, general heating
	Outside the pipe to protect the air flow rate	1 L/min
	Protect the gas flow rate in the pipe	4 gear adjustable (0,50,200,250ml / min flow)
	safety precautions	Cooling water flow rate, protective gas pressure, furnace body temperature, power supply temperature, graphite pipe installation alarm
data	Measurement method	Graphite furnace method
handling	Concentration calculation method	Standard curve method (6 linear, nonlinear fitting methods), standard addition method, interpolation method
	Number of repeated measurements	1-30 times, calculate and give the mean, standard deviation and relative standard deviation of the absorbance and concentration
	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
else	Mass (weight) of kg	90Kg
	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
	end-use temperature	10℃ 30℃
		40% 85%

		Atomic absorption spectrophotometer-graphite furnate method
Instrument model		YK -3228AA
	Instrument type	single beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
optical	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
system	wavelength coverage (nm)	190-900
	The wavelength indicated the error	0.2 nm
	Wavelength repeatability (nm)	≤0.1nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	8 The lamp
	Elemental lamp type	Ordinary element lamp
	Read the way	transmittance, absorbance, concentration
	Light range	0-125%,-0.1-3.00A
Photometric	Cu static baseline drift	±0.003A/30min
inotomethe	The Cu dynamic baseline drift	±0.005A/15min
	background correction	Deuterium lamp> =40 x (1 Abs)
	Feature quantity	The Cd feature amount is 0.6 pg A Cu feature quantity of 20 pg
	detection limit	The Cd detection limit was 1.0 pg The detection limit of Cu was 25 pg
	repetitiveness (Cd)	RSD≤3%
	Graphite furnace heating range	Room temperature of ~ 3,000 $^\circ \! \mathbb{C}$
Graphite	High-power heating range	1500 °C ∼3000 °C
furnace	Slping with hold time	1s~255s
analysis	heating rate	The maximum heating rate is 2000 $^\circ\!\! { m C}$ / s
	Atomized heating mode	Light control heating, time control heating, general heating
	Outside the pipe to protect the air flow rate	1 L/min
	Protect the gas flow rate in the pipe	4 gear adjustable (0,50,200,250ml / min flow)
	safety precautions	Cooling water flow rate, protective gas pressure, furnace body temperature, power supply temperature, graphite pipe installation alarm
	Measurement method	Graphite furnace method
data handling	Concentration calculation method	Standard curve method (6 linear, nonlinear fitting methods), standard addition method, interpolation method



	Number of repeated measurements	1-30 times, calculate and give the mean, standard deviation and relative standard deviation of the absorbance and concentration
	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
else	Mass (weight) of kg	90Кg
	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
	end-use temperature	10℃ 30℃
	Use humidity	40% 85%

		Original absorption spectrophotometer-flame & graphite furnace all-in-one machine
I	Instrument model	YK -3238AA
	Instrument type	single beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
optics	wavelength coverage (nm)	190-900nm
system	The wavelength	190-9001111
	indicated the error Wavelength	0.2 nm
	repeatability (nm)	≤0.1nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	8 The lamp
	Elemental lamp type	Ordinary element lamp
	Read the way	transmittance, absorbance, concentration
luminosi	iLight range	0-125%, -0.1-3.00A
	Cu static baseline drift	
ty	The Cu dynamic	±0.003A/30min
functio	baseline drift	±0.005A/15min
n	background correction	Deuterium lamp> =40 x (1 Abs)
	characteristic concentration (Cu)	<0.025ug/ml
	detection limit (Cu)	≤0.035ug/ml ≤0.006ug/ml
	repetitiveness	•
	Acetylene flow	RSD≤0.6%
flame	regulation Air-assisted air	Automatic 12 gear
	conditioning	Automatic 4 gear
analyse	Burner lift	Automatic lifting
	burner	Metal titanium burner
	sprayer	High-efficiency glass atomizer
	atomizer chamber	Aatomization chamber of corrosion resistant materials
	safety precautions	Abnormal pressure protection of flame gas and combustion-supporting gas
	Feature quantity	The Cd feature amount is 0.6 pg A Cu feature quantity of 20 pg
	detection limit	The Cd detection limit was 1.0 pg The detection limit of Cu was 25 pg
	repetitiveness (Cd)	RSD≤3%
Graphi	Graphite furnace	
te	heating range	Room temperature of ~ 3,000 $^\circ\mathrm{C}$
furnac	High-power heating range	1500 °C ∼ 3000 °C
е	Slping with hold time	1500 C 5000 C 15~255s
analysi	heating rate	The maximum heating rate is 2000 $^{\circ}$ C / s
•	Atomized heating mode	Light control heating, time control heating, general heating
S	Outside the pipe to protect the air flow rate	1 L/min
	Protect the gas flow rate in the pipe	4 gear adjustable (0,50,200,250ml / min flow)
	safety precautions	Cooling water flow rate, protective gas pressure, furnace body temperature, power supply temperature, graphite pipe installation alarm



	Measurement method	Flame method, graphite furnace method, hydride generationatomic absorption method, flame emission method
data	Concentration	Standard curve method (6 linear, nonlinear fitting methods), standard addition
handle	calculation method	method, interpolation method
	Number of repeated	1-30 times, calculate and give the mean, standard deviation and relative standard
	measurements	deviation of the absorbance and concentration
	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
	Mass (weight) of kg	90Kg
	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
else	end-use temperature	10 ℃ 30 ℃
	Use humidity	40% 85%

		Original absorption spectrophotometer-double beam-flame method
I	nstrument model	YK -3218AA
	Instrument type	dual-beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
ontics	wavelength coverage	190-900
	(nm) The wavelength	0.15 nm
	indicated the error Wavelength	
	repeatability (nm) Spectral bandwidth	≤0.05nm
	bias	±0.02 nm
	The lamp position	8 The lamp
	Elemental lamp type	Ordinary, high-performance element lamp
	Read the way	transmittance, absorbance, concentration
uminos	Light range	0-125%,-0.1-3.00A
ity	Cu static baseline drift	±0.002A/30min
	The Cu dynamic baseline drift	±0.004A/15min
11	background correction	Deuterium lamp> =40 x (1 Abs)
	characteristic	Self-priming> =80 x (1 Abs)
	concentration (Cu)	≤0.02ug/ml
	detection limit (Cu)	≤0.004ug/ml
	repetitiveness	RSD≤0.5%
	Acetylene flow regulation	Automatic 12 gear
	Air-assisted air conditioning	Automatic 4 gear
	Burner lift	Automatic lifting
,	burner	Metal titanium burner
	sprayer	High-efficiency glass atomizer
	atomizer chamber	Aatomization chamber of corrosion resistant materials
	safety precautions	Abnormal pressure protection of flame gas and combustion-supporting gas
	Measurement method	Flame method, hydride generation-atomic absorption method, flame emission method
	Concentration calculation method	Standard curve method (6 linear, nonlinear fitting methods), standard addition method, interpolation method
	Number of repeated measurements	1-30 times, calculate and give the mean, standard deviation and relative standard deviation of the absorbance and concentration
ng	Report printing	Parameter printing, and data results printing
	computer	circumscribed
	outline dimension	830*650*560
else	Mass (weight) of kg	100Кg
	power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz



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•	end-use temperature	10 °C 30 °C
Ī	Use humidity	40% 85%
		Original absorption spectrophotometer-double beam-flame & graphite furnace
		all-in-one machine
I	Instrument model	ҮК -3268АА
	Instrument type	dual-beam
	monochromator	C-T, 350mm
	dispersion element	Rating 1200 bars / mm, flashing wavelength 250nm
	spectral bandwidth (nm)	0.1,0.2,0.4,0.7,1.4,2nm six gear automatic switch
optics	wavelength coverage (nm)	190-900
system	The wavelength indicated the error	0.15 nm
	Wavelength repeatability (nm)	≤0.05nm
	Spectral bandwidth bias	±0.02 nm
	The lamp position	8 The lamp
	Elemental lamp type	Ordinary, high-performance element lamp
	Read the way	transmittance, absorbance, concentration
uminoc	Light range	0-125%,-0.1-3.00A
uminos	Cu static baseline drift	±0.002A/30min
ity functio n	The Cu dynamic baseline drift	±0.004A/15min
	background correction	Deuterium lamp> =40 x (1 Abs) Self-priming> =80 x (1 Abs)
	characteristic concentration (Cu)	≤0.02ug/ml
	detection limit (Cu)	≤0.004ug/ml
	repetitiveness	RSD≤0.5%
	Acetylene flow regulation	Automatic 12 gear
flame	Air-assisted air conditioning	Automatic 4 gear
analyse	Burner lift	Automatic lifting
	burner	Metal titanium burner
	sprayer	High-efficiency glass atomizer
	atomizer chamber	Aatomization chamber of corrosion resistant materials
	safety precautions	Abnormal pressure protection of flame gas and combustion-supporting gas
Graphi te furnac e	Feature quantity	The Cd feature amount is 0.5 pg A Cu feature quantity of 20 pg
	detection limit	The detection limit of 0.8 pg for Cd The detection limit of 25 pg for Cu
	repetitiveness (Cd)	RSD≤2.5%
	Graphite furnace heating range	Room temperature of ~ 3,000 $^\circ \! \mathbb{C}$
	High-power heating	1500℃~3000℃
nalysi	range Slping with hold time	1s~255s
S	heating rate	The maximum heating rate is 2000 $^\circ\!\mathrm{C}$ / s
	Atomized heating mode	Light control heating, time control heating, general heating



Outside the pipe to protect the air flow rate	1 L/min
Protect the gas flow rate in the pipe	4 gear adjustable (0,50,200,250ml / min flow)
safety precautions	Cooling water flow rate, protective gas pressure, furnace body temperature, power supply temperature, graphite pipe installation alarm
Measurement method	Flame method, graphite furnace method, hydride generation- -atomic absorption method, flame emission method
Concentration	Standard curve method (6 linear, nonlinear fitting methods), standard
calculation method	addition method, interpolation method
Number of repeated	1-30 times, calculate and give the mean, standard deviation and relative standard
measurements	deviation of the absorbance and concentration
Report printing	Parameter printing, and data results printing
computer	circumscribed
outline dimension	830*650*560
Mass (weight) of kg	100Kg
power requirement	The voltage is 220V \pm 22V and the frequency is 50 Hz \pm 1Hz
end-use temperature	10° ℃ 30° ℃
Use humidity	40% 85%
	protect the air flow rate Protect the gas flow rate in the pipe safety precautions Measurement method Concentration calculation method Number of repeated measurements Report printing computer outline dimension Mass (weight) of kg power requirement end-use temperature