K1100F

Automatic Kjeldahl Analyzer

Hanon K1100F Automatic Kjeldahl Analyzer is an automatic device integrating distillation and titration functions designed based on classic Kjeldahl nitrogen determination method. It's equipped with the latest core control system, powerful automation and high-quality components, can easily achieve automatic waste discharge and cleaning of digestion tubes and titration cups, control steam supply and real-time detection of condensation temperature. High-accuracy charging pump and titration system ensure test results accuracy, and multiple fluid level detection gives smooth test process.

Characteristics

- Automatic distillation, titration, calculation, printing, drain and cleaning function, safety and saving-time.
- Visibletitration cup design gives operatorreal-time control of the whole test process.
- Steam flow is controllable, satisfying differenttest requirements.
- Regent barrel enjoys fluid absence warning function, ensuring smooth test going.
- High-precision charging pump and titration system ensure test results accuracy.
- Large LCD touch screen gives visual operationand abundant information, enabling user to have a good commandof it.
- USB or RS485 interface is optional for PC connection.
- Distilled liquid temperature is detected real time. Emergency stop against temp anomaly.
- Double distillation modelmeets different experiments, to retard the speed of acid-base reaction.
- Digestion tube fast drain function is used to avoid operator touch distilled hot reagents, protecting operators.
- · Printer is built in.



Complete microcomputer control

Automatic completion of distillation, titration, calculation, printing, waste discharge and multiple protections, i.e.failure self-detection, hints of condensed water shortage, displacement of safety door and digestion tube and so on.

Large LCD Touch Screen Panel

Large LCD touch screen gives visual operation and abundant information, enabling user to have a good command of it.

K1100F

Complete compatible design

Compatible with congeneric products perfectly

Performance advantage

- Compatible with φ42mm digestion tube
- · Titration while distillation, enhance the efficiency rapidly.
- · User friendly design, color touch screen, easy for operating
- · Faster ARM system, faster operating rate
- Digester model SH220F and SH420F is matching K1100F, with ϕ 42 digestion tube









Technical data

Measuring range	0.1mg ~ 200mg N	
Analysis time	5 ~ 10min/sample	
Reproducibility	Average value relative error ±0.5%	
Recovery	≧99.5%	
Burette volume	1.0µL/step	
Sample capacity	solid≦5g/sample, liquid≦20mL/sample	
Water consumption in the distillation process	1.5L/min	
Data storage capacity	1800 groups	
Power supply	220VAC±10%, 50Hz	
Power	2Kw	
Net weight	38Kg	
Dimensions	455mm×391mm×730mm	

K9860

Automatic Kjeldahl Analyzer

K9860 Automatic Kjeldahl Analyzer is an automatic device integrating distillation and titration functions designed based on classic Kjeldahl nitrogen determination method. It's equipped with the latest core control system, powerful automatic degree and high-quality components, can easily achieve automatic cleaning of digestion tubes and titration cups, control steam supply and have real-time detection of condensation temperature. High-accuracy charging pump and titration system ensure test results accuracy, and multiple fluid level detection gives smooth test process.



- Automatic cleaning ensure operator safety and save time.
- External titration cup design gives operator real-time control of the whole test process.
- High-precision charging pump and titration ensure test results accuracy.
- The temperature of distilled liquid is detected real time. If the temperature of distilled liquid is abnormal, to ensure the accuracy of experiment's result, instrument will stop working.



Features

- High accuracy dozing and working: adopt 4 KNF pumps work for dozing, measurement liquid volume.
- Easy Maintenance: Pre-install functions of cleaning, include receiving cup cleaning, alkali pipeline cleaning, boric acid pipeline cleaning, acid washing, steam bottle evacuation. support customer make the routine maintenance easily.
- High titration accuracy, up to 2.0µL/step.
- Integrated printer on the instruments



Technical data		
Measuring range	0.1mg \sim 200mg N	
Analysis time	$5\sim$ 10min/sample	
Reproducibility	Average value relative error ±0.5%	
Recovery	≧99.5%	
Burette volume	2.0µL/step	
Sample capacity	solid≦5g/sample, liquid≦20mL/sample	
Water consumption in the distillation process	1.5L/min	
Data storage capacity	1000 groups	
Power supply	220VAC±10%, 50Hz	
Power	2Kw	
Net weight	38Kg	
Dimensions	455mm×391mm×730mm	

K9840

Auto Kjeldahl Distiller

Hanon K9840 Auto Kjeldahl Distiller is designed to determine nitrogen content of samples base on Kjeldahl nitrogen determination method. Fully intelligent software is able to complete sample distillation within minutes, boasts automatic regent quantification and filling, automatic test. The distillation and condensation automatic cleaning system further enhances measurement precision; explicit interfaceis easy foroperation. It is widely used in food processing, feed production, tobacco, livestock, soil fertility, environmental monitoring, medicine, agriculture, scientific research, teaching, quality control and other fields for the test of nitrogen or protein content, can also be used for the test of ammonium, volatile fattyacid / alkali, and so on.



- Display: 4.3 inch color screen.
- Manual/Automatic mode changeover free.
- · Automatic Alkali pipeline washing function.
- · Automatic or manual filling mode is optional according to test need.
- Distillation time can be edited freely, and automatic alarming upon completion.
- Automatic cleaning of control system and distiller, ensuring high measurement accuracy.
- Intelligent design of nitrogen tube peripheral facilities including safety designs and displacement hint.
- Intelligent cooling water control system achieves cooling water control and test
- · Emergency stop operation is able to deal with unexpected accidents.
- Automatic fault detection and intelligent audible and visual alarm system are available.
- Calibration Function: Dilution water calibration, Alkali solution calibration, Boric acid solution calibration, washing flow calibration.
- Safety door, digestion tube and cooling water condition is displayed at real time when running.
- Testing model is built in, for detect most functions condition.



Features

- · Automatic accurate distribute alkali and boric acid solution.
- Perfect safety protection system gives distiller and tubes measurement and protection against over temperature and over pressure.
- Calibration Function: Dilution water calibration, Alkali solution calibration, Boric acid solution calibration, Washing flow calibration.
- Safety door, Digestion tube and cooling water condition is displayed at real time when running.



Technical data	
Managemen	0.4mm 240mm N
Measuring range	0.1mg ~ 240mg N
Recovery	≧99.5%
Sample capacity	solid≦6g/sample, liquid≦16mL/sample
Distillation speed	3-6min/sample
Cooling water consumption	1.5L/min
Operating mode	Manual/automatic mode
Display modes	4.3" LCD screen
Power supply	220VAC±10%, 50Hz
Power	1.3KW
Net weight	30Kg
Dimensions	400mm×385mm×735mm

SH420F

Kjeldahl Digestion System

Hanon SH420F Graphite Digester adopts globally advancedhigh-temperature infrared radiation heating technology and microprocessor control platform, accurate temperature control and quick temperature rise. It has two kinds of temperature rise mode: linear and curve temperature rise mode, and offers 20 digestion programs for control of temperature rise curves.

Neutralization system is including ternary filtration functions, condensation, neutralization and filtration. The product adopts high-quality anticorrosive Pumps, low noise, strong suction, reduce exhaust emissions, eco-friendly.



- 20positions enhance working efficiency rapidly.
- Graphite block have longer life after special anti-oxidation processing and heating more uniform.
- · Corrosion-resistant design.
- It adopts advanced PID temperature control technology,high accuracy heating up to 400°C only 25minutes.
- Multi-protection, Over-current protection, high temperature warning, overload protection.
- It adopts 5.7" color screen, easy for use.
- Standard configuration with waste gas collection hood WD03.
- Temperature control model, program control, curve and linear temperature rise.

S402 Exhausting System

- · Mould design, compact appearance.
- Absorption device area is translucence design, easy for inspection and changing.
- Suction pressure is adjustable when become negative, to avoid acid gas spilling oremptying.
- Anticorrosion vacuum pump, low noise, large suction, reduce wasted gas exhausting and environmental friendly.
- Ternary filtration system (water condensation, alkali neutralization and active carbon filtration) ensure perfect neutralization and absorption performance. PTFE anticorrosion pipe design, improve using life.





S402

SH220F

Kjeldahl Digestion System

SH220F Graphite Digester includes globally advanced technology, features quick digestion, high efficiency and easy for use, etc., It's widely used in such fields as food, medicine, agriculture, forestry, environmental protection, chemical engineering, biochemistry, as well as universities, research departments and so on, for sample digestion prior to the chemical analysis of soil, feed, plants, seeds, minerals etc., suitable for matching K9840 analyzer.



Graphite block have longer life after special anti-oxidation processing.

It adopt advanced PID temperature control technology, high accuracy heating up to 400 °C only cost 20minutes.



WD03 Gas Collection Hood

Using PFA sealed cap, longer life, dealing effect well.

Clip-on sealing cap, easy for changing.

Specialized water jet vacuum pump is adopted, don't need electric power.

Drip tray design, reduce corrosion damage from acid solutions.

Characteristic

- 20 positions, enhance working efficiency rapidly.
- · Corrosion-resistant design.
- It adopt advanced insulation technology, eco-friendly, reduce energy intensity maximum limitedly.
- Multi-protection, Over-current protection, high temperature warning, overload protection.
- · LCD display.
- It's used with microwave reaction system, pretreat for microwave digestion or removing acid after digestion.

Note: "●" with the same technical index: "—" without

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Technical data					
	SH420F	SH220F			
Temperature range	Room temperature +5 - 450 °C	•			
Temperature accuracy	±1°C	•			
Heating method	Infrared heating and high-purity graphite conduction	•			
Heating insulation method	unique air duct insulation technology	•			
Digestion tube capacity	300mL	•			
Capacity per batch	20pcs/batch	•			
Power supply	220 VAC±10% 50HZ	•			
Power	3600W	•			
Dimensions	515mmX458mmX730mm	515mmX421mmX211mm			
Net weight	40Kg	25Kg			