

K1306 Automatic Kjeldahl Nitrogen Analyzer

K1306 — Automatic Kjeldahl Nitrogen & Protein Analyzer

Overview

K1306 fully automated Kjeldahl nitrogen analyzer is widely used for the determination in the industries of food, feed, forage, pharmaceutical, soil, chemical industry, agriculture, forestry, material, environment monitoring and etc.

Features

- Fully automatic single-sample testing: once a sample starts, the complete test cycle runs with no operator attendance required.
- Comply with international / national standard, adopt national standard Kjeldahl method: digest sample in concentrated sulphuric acid environment, steam distillation in alkaline environment, boric acid absorption, indicator titration end-point color determination method. Adopt international advanced high-precision high-resolution 16-bit tri-phosphor digital signal color sensor determinate titration end-point method(successfully developed in 2005).
- Dynamic titration technology (known as distilling while titrating, successfully developed in 2007) could accomplish the distillation, titration and caculation synchronically.
- The visible titration flask make the color change during the titration could be clearly shown.
- In 2007, Sonnen successfully developed the unique auto determining module for nitric nitrogen and high nitrogen.
- Sonnen is one of the drafters of China's national standard GB/T22923-2008.
- Sonnen is one of the drafters of the China's official standard JJF 109-2012 "Calibration Specification for Nitrogen Analyzer".
- Adding alkali and/or acid, distilling and titrating, titration buret waste removing, discharging, calibrating, fault detecting, solution level monitoring, and calculating can all be realized fully automatically.
- Titration color can be calibrated both automatically and manually. The titration endpoint is judged by the color signal collected by the high accurate 16-bit 3-primary-color digital signal color sensor.
- 2.0μL high-precision titrating system and professional unibody precision-work plunger are the assurance of the determination accuracy and operation reliability.
- The color LCD touch screen is equipped. The whole experiment procedure is real-time monitored and shown on the screen, and the condition can be auto-saved.
- Date Storage: As many as 1,000 sets of testing data can be fully stored.
- Not-in-position prompt of security door and digestion tube.
- Mature and stable steam generator technology is applied, automatic preheating, water supplying, steam pressure controlling, dry burning prevention, and cleaning can all be realized automatically.
- The steam pressure is automatically controlled within the safe range, thus danger caused by steam pressure is prevented.
- Double distillation modes are designed, both manual and automatic models can be randomly switched.
- Alkali pump adopts high-reliable PTEF bellows pump, which is anti-corrosion and anti-partial-plugging, stable during liquid adding, and free from the danger cause by negative pressure suction.

- Water-saving Design: Real-time monitoring of the circulating cooling water flow rate, warning reminder whenever the water pressure is lower than it is supposed to be.
- Distilling system is specially designed in accordance with Ammonia escaping rule, which is an insurance of the stable high reliable recovery rate.
- The digestive tube is specially designed to be surrounded with intelligitized facilities, and the transparent acrylic cover is equipped for total protection.
- Steam generator is equipped with pressure sensor, temperature sensor, temperature protection switch, water level double detection, and other protections like these.

Specifications

Measurement range	0.1 mg–240 mg N
Measurement time	3–8 min/sample
Recovery	≥99.5%
Repeatability	≤0.5%
Steam flow rate	0–100%
Distillation time	0–99 minutes of dynamic continuous adjustment
Titration accuracy	2.0μL
Sample size	Solid ≤ 6g; Liquid ≤ 25 ml

All technical parameters are subject to change without notice.

Applicable standards

GB/T22923-2008 · JJF 109-2012

Application fields

Food & feed, dairy, soil & agriculture, fertilizer, environmental monitoring and the chemical industry — any method built on Kjeldahl nitrogen / protein determination, across research, teaching and quality-supervision laboratories.

Specifications as published at www.sino-sonnen.com. Final configuration is confirmed per order — request a quotation: info@sino-sonnen.com · R&D: Jiading District, Shanghai · Manufacturing: Luoyang, Henan, China