

ON - 6801

Oxygen and nitrogen analyzer

Desktop integrated design, beautiful appearance and easy operation. Oxygen nitrogen analyzer is an intelligent analytical instrument, which is composed of pulse furnace and computer, with pyroelectric sensor and thermal conductivity detector as the core. The instrument is mainly used for the analysis of oxygen and nitrogen content in metallurgy, machinery, commodity inspection, scientific research, chemical industry, ferrous metals, non-ferrous metals, rare earth metals, graphene, nano materials, new energy materials, copper alloys, superalloys, inorganic substances, ores, ceramics and other substances



Instrument composition



- High precision electronic balance
- Electrode pulse furnace and high-precision infrared
- Integrated thermal conductivity detector
- Special customized professional industrial personal computer printer
- cooling-water machine

Technical indicators

| | | | |
|--|---|------------------------|------------|
| measuring range | Oxygen: 0.00001% ~ 5% (expandable to 100%) Nitrogen: 0.00001% ~ 20% (expandable to 100%) | | |
| Instrument accuracy | Oxygen: 1.0ppm or RSD ≤ 1.0% Nitrogen: 1.0ppm or RSD ≤ 1.0% Based on solid standard sample, one of them is satisfied | | |
| Analysis time | 120~240 seconds (can be set arbitrarily according to the analysis material) | | |
| Analysis error | Nitrogen is superior to GB/T 20124-2006 | | |
| Carrier gas | High purity helium or argon (99.999%, 0.3~0.5mpa) | | |
| Power gas | Ordinary nitrogen (or purified compressed air 0.3~0.5mpa) | | |
| Size | W700mmxD655mmxH860mm | Weight | 150 kg |
| Weighing accuracy of electronic balance | 0.0001g | Sample weighing | 0.2 ~ 1.0g |

Instrument characteristics

detector:

Oxygen: pyroelectric solid-state infrared sensor with low noise and high sensitivity

Hydrogen: low noise, high sensitivity and high pyroelectric solid-state infrared sensor (high-precision thermal conductivity detector is optional)

Pulse heating furnace:

The maximum current is 1500A, the maximum power is 10KVA, and the maximum temperature is 3500 °C.

Air circuit design:

Digital pressure control system and high-precision flow control analysis flow are selected for gas circuit design to improve the stability of analysis data.

Automatic purging function:

The automatic purging function can effectively reduce the impact of dust on the analysis data.

High stability stepping motor:

High stability stepping motor is adopted, and the continuous service life can reach 200000 hours.

Circulating cooling system is adopted for pulse electrode:

The pulse electrode adopts a circulating cooling system, and the temperature of the cooling circulating water is monitored in real time, which is characterized by stable cooling and high reliability.

Purification furnace device:

The addition of purification furnace in the traditional analysis gas path can effectively remove impurities in the carrier gas, improve the purity of the carrier gas, and make the analysis data more stable.

Double shaft guide integrated cylinder:

The double axis guide integrated cylinder ensures the stable lifting of the electrode, the good contact between the graphite crucible and the upper electrode, and the uniform stress of the graphite crucible, which is conducive to long-term high temperature heating.

The electrode pulse furnace support is integrally cast:

The electrode pulse furnace support is integrally cast and designed in light weight, which improves the mechanical strength and ensures the concentricity of the upper and lower electrodes.

It can expand the one-time analysis results of the three elements of oxygen, nitrogen and hydrogen

This instrument is simple and fast to maintain, simple to operate, durable, and suitable for various analysis fields.