

Fast Solvent Extractor



ORSE-829

The Fast Solvent Extractor uses high-temperature and pressurized solvent extraction technology to quickly extract solid liquid extraction methods for organic target ingredients in solid or semi-solid samples with solvents. Because both its extraction efficiency and sample flux are far superior to other traditional extraction methods, it is a widely used technology in the market today.

Features:

1. Working condition

- 1.1 Power supply: AC 220V, 50~60HZ AC power supply
- 1.2 Ambient temperature: 5-45°C
- 1.3 Relative humidity: 20%-80%
- 1.4 Gas requirements: nitrogen
- 1.5 Continuous working time: more than 24 hours
- 1.6 Machine power: 700W

2. Technical index

2.1 Extraction method: sequential extraction to avoid cross contamination

FSE rapid solvent extraction uses conventional solvents, uses increased temperature and increased pressure to improve the efficiency of extraction. As a result, the extraction time is greatly accelerated and the amount of extraction solvent is significantly reduced. Increasing the temperature accelerates the extraction power, while increasing the pressure increases the boiling point of the solvent, so that the solvent remains liquid during the extraction process, which not only increases the safety, but also greatly improves the extraction efficiency. The instrument uses sequential extraction to automatically complete the cleaning action without personnel involvement.

2.2 Furnace:

Put the extraction tank into the oven cavity automatically and send it back to the transfer tray automatically after the extraction. The furnace body adopts a new 360-degree full-round heating method, which can quickly heat up to the set temperature, and at the same time ensure that the entire extraction tank is heated uniformly. Temperature control up to 200°C, with over-temperature protection. The extraction tank is positioned vertically and the liquid flows from top to bottom.

2.3 ★High pressure infusion pump

Flow rate range: 0-100ml/min, output pressure: normal pressure ~ 25Mpa;
 Fully automatic sensor automatically pressurizes or releases pressure during heating.

2.4 Pressure control unit

Built-in pressure control unit, overpressure protection system and gas-liquid isolation protection device.

2.5 ★Extraction tank

Volume: 1, 5, 10, 22, 34, 66, 100 mL (7 types) are available.
 Type of extraction tank: new T-shaped extraction tank, simple structure, easy to disassemble.
 Working pressure: 0~20Mpa.

2.6 ★Extraction tank transfer tray

Extraction position: 26 extraction positions (including 24 extraction tank positions and 2 cleaning positions).
 The lighting function of the extraction and collection areas is convenient for the operator to understand the operation of the instrument in time.
 The dustproof design of the extraction tray and collection tray protects the instrument from dust pollution when it is running or when the instrument is idle.

2.7 Collection bottle

Collection bottle volume: 26-bit 250ml collection position, or 26-position 60ml collection position (adapter required), or 26-position 250ml and 60ml collection position (adapter required) custom combination.
 The bottle cap has a solvent-resistant septum (TEF coating).
 Collection bottle detection function: to ensure the safe collection of extracted samples.

2.8 Liquid pipeline

Using chemical passivation technology, a certain proportion of non-strong acid extractants such as acetic acid and phosphoric acid can be used.

2.9 Control interface: touch control interface, easy to operate

2.10 ★Solvent controller

The quaternary low-pressure gradient automatically switches up to 4 solvents and mixes and mixes solvents of different proportions.

2.11 Extraction time

Less than or equal to 20 minutes, single cycle

3. Configuration requirements

- 3.1 Host of Accelerated solvent extraction instrument: 1 set
- 3.2 Extraction tank (34mL, 22mL, 66mL optional): 1 set
- 3.3 Diatomite: 1 bottle
- 3.4 Nitrogen cylinder: 1 set