

## oil testing centrifuge with temperature control and 4000rpm

The oil testing centrifuge is a special centrifugal equipment developed for the petroleum industry, specializing in the rapid and accurate separation of water and sediment in crude oil.

### Oil Testing Centrifuge

Manufactured in accordance with GB/T6533-86 standard, the oil testing centrifuge is designed for efficient and accurate separation of water and sediment in crude oil samples. Featuring advanced temperature control, high-speed centrifugal separation, and robust safety diagnostics, it is widely used in petroleum extraction, refining, quality control, scientific research, and environmental monitoring.

### Features

1. **Accurate display and easy-to-operate interface:** Large LCD screen with clear display of rotor number, speed, time, temperature, centrifugal force, acceleration/deceleration rate, and fault information. Intuitive touch panel for simple parameter setup and real-time monitoring.
2. **Efficient heating and temperature control:** Rapid and uniform heating via ring heater, temperature range from room temperature +10°C to 70°C. Stable and consistent temperature maintenance improves separation precision.



3. **Powerful frequency conversion motor drive:** Large torque motor offers smooth speed changes, long service life, and low noise for reliable long-term operation.
4. **Safety and fault diagnosis:** Built-in self-diagnosis system automatically detects and displays faults (overspeed, over-temperature, imbalance, unlocked door/cover) and stops operation to ensure safety.
5. **Special process centrifugal tube:** Durable, rupture-resistant glass tubes proven in major oilfields such as Daqing ensure safe, reliable high-speed operation.
6. **Flexible parameter adjustment:** Microcomputer control system allows free setting and real-time adjustment of speed, force, temperature, time, and acceleration/deceleration rates for diverse experimental needs.

### **Working Principle**

1. High-speed centrifugal force separates water and sediment from crude oil based on density differences. Lighter water/sediment is excluded, while heavier substances settle at the tube bottom. Temperature control ensures complete and stable separation.
2. Centrifugal separation results in water and sediment gathering at the bottom, oil remains in the upper layer, achieving clear water-oil separation.
3. Ring heater and temperature control maintain ideal sample conditions for precise, reproducible separation.
4. Intelligent self-diagnosis monitors equipment status, automatically shuts down on fault, and displays detailed information for safe, reliable operation.

## Application Areas

1. **Oil Extraction and Production:** Determination of crude oil moisture for quality monitoring and efficient refining in oilfields and companies.
2. **Refineries and Oil Testing:** Moisture and sediment analysis in crude oil for quality assurance and chemical processing.
3. **Scientific Research and Quality Control:** Component analysis and quality assessment in research institutes, petrochemical labs, and monitoring stations.
4. **Environmental Protection and Pollution Monitoring:** Water and sediment detection in crude oil spills and polluted sources for pollution management and remediation.

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<b>Model</b>	<b>CS160</b>
Maximum speed	4000rpm
Maximum RCF	3150xg
maximum capacity	4x100ml
Rotation Speed Accuracy	±10rpm

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<b>Model</b>	<b>CS160</b>
Timer	1 to 99 minutes
Temperature setting range	ambient+10°C to 70°C
Noise	≤65dB
Power supply	230Vac, 50Hz
Power	1500W
Overall dimensions	520x550x400mm
Net weight	85kg