

## TP-122 Anti-Emulsification Performance Tester For Petroleum And Synthetic Fluids



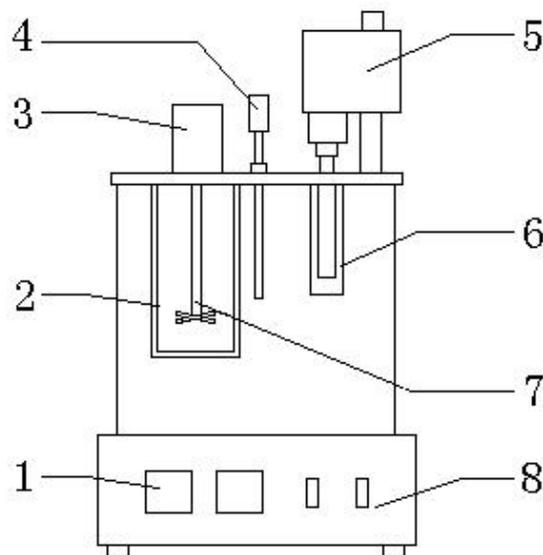
GB/T 7305 ASTM D1401

### Introduction

This instrument complies with GB / T7305, ASTM D 1401 for the determination of water separability of petroleum oil and synthetic liquid. It is applied to test samples whose kinematic viscosity is 30~100mm<sup>2</sup>/s at 40 °C and the test temperature was 54 ± 0.1 °C. It also can be used for oil whose viscosity is above 100mm<sup>2</sup>/s and the test temperature is 82±0.1 °C.

### Structure Feature

The instrument is composed of a digital temperature controller thermostatic bath, a sample stirring device etc. The sample stirring device can adjust the position up and down, user can observe the stirring process of the sample, realizing the integration of the instrument. The appearance is nice, and the operation is convenient.



1. Digital display temperature control meter    2. Heater    3. Bath mixer motor    4. Temperature Sensor    5. Test tube mixing motor    6. Test tube    7. Stir rake    8. control panel

Figure 1: Structure

## Technical Specification

1. Input voltage: AC220V±20V, 50Hz
2. Input power: 1.5kW
3. Temperature adjustment range: room temperature ~90°C
4. Temperature control accuracy: 54±0.1°C; 82±0.1°C
5. Bath stirring motor: 15W
6. Sample stirring motor: 1500±15rpm
7. Automatic timing: 5 minutes
8. Structure: 2-hole rotary table, slide bar stirrer

## Working Principle

The instrument uses a digital temperature controller with a thermal resistance sensor to control the temperature. By stirring motor, the bath reaches the temperature required for the test (54±0.1°C; 82±0.1°C), and is equipped with an automatic timing device to achieve high temperature control accuracy. Intuitive display, good reliability, saving test time.

## Operation

1. Place the instrument on the bench and connect the patch cords. All switches are in the closed position. Connect the power cord and note that there must be a good ground wire.
2. Add water to the bath (54 ± 0.1 °C) or a more viscous oil (82 ± 0.1 °C).
3. Turn on the power switch, the power indicator lights, and the bath mixer starts to work.
4. The upper digital display of the intelligent temperature controller is the actual measured temperature of the bathtub, and the lower row of digital display is the set temperature. Set the temperature control point temperature, please follow the following procedures: Press the key , the upper row of digital display SP, press the increasing number key  to increase number, press the reduction key  for number reduction. When set well the temperature, press the key again , back to standard mode. The instrument automatically controls the heating tube to keep the bath temperature constant to the set temperature.
5. Turn on the sample stirring switch, the motor starts to stir the sample, and it automatically stops stirring after 5 minutes. After the end of the test, turn off the sample agitation switch.
6. The preparation and operation of the test shall be conducted in accordance with the requirements of GB/T 7305.

## Maintenance and repair

1. Keep the instrument clean and prevent acids, alkalis, oil and moisture.
2. When the instrument malfunctions, it should be repaired by a professional and can not be disassembled.
3. Common faults and causes.

Faults	Cause
Indicator lamp not light, digital meter with no display.	Fuse burnt, power wire off.
Motor not rotate.	Motor lead off, capacitor lead detached, switch in poor contact
Heating tube not heating.	Heating tube leads not in good contact; digital thermostats damaged or lead removed.

## CHONGQING TOP OIL PURIFIER CO., LTD

Contact: Jennifer Yang | Tel: +86(23)88901306 | Cel: +86 17338389692 (Wechat/WhatsApp) | Fax: +86(23)88901306

No. 1, Jianlong N. Rd., Jiulongpo District, Chongqing, China | Email: sales9@topoilpurifier.com | Web: www.topoilpurifier.com; www.toptester.com.cn