



## AWD-05F Automatic Distillation Tester ASTM D86

AWD-05F is designed and manufactured according to the requirements of the national standard of the People's Republic of China GB/T 6536-2010 "Determination of Atmospheric distillation characteristics of Petroleum products", and also conforms to ASTM D86 standard. It is suitable for distillate fuels such as natural gasoline (stable light hydrocarbon), light and middle distillate, automotive spark ignition engine fuel, aviation gasoline, jet fuel, diesel and kerosene, as well as naphtha and petroleum solvent oil products, this instrument is not suitable for products containing more residues.

### Main Characteristic

- 1. Built-in industrial computer, standard 12-inch color LCD touch screen. Chinese/English human-machine interface, in line with windows operation habits, the experimental process of system design and various tips can help users to correctly operate the instrument, so that the experiment process becomes easier. Intelligent pop-up window design makes the instrument simple and easy to learn, and routine experiments can be completed without reading the instructions. The experimental results are accurate, the data recording is convenient, and the repeatability and reproducibility can meet the standard requirements.
- 2. The instrument uses a number of domestic new materials and high-tech, coupled with the ingenious overall design, greatly simplifying the structure of the instrument compared with similar instruments on the market, the volume is reduced by 20%, the weight is reduced by 60%. The reliability of the whole machine is improved while saving electricity.
- 3. The cryogenic system of the whole machine adopts semiconductor refrigeration technology, which has fast refrigeration speed and convenient temperature control, and the cold bath temperature can be arbitrarily set within the range of  $0\sim60\pm0.5^{\circ}\text{C}$ .
- 4. The user can set the conditions for the end of the experiment according to the recovery volume or oil vapor temperature. When the experiment is carried out to meet the set conditions, the instrument will automatically end the experiment.
- 5. Built-in "temperature - pressure automatic correction" function. The instrument automatically and in real time corrects the detected oil distillation temperature to the corresponding temperature at the standard atmospheric pressure of 101.3KPa. The instrument will automatically draw the distillation curve and recovery volume curve corresponding to the time, which can be viewed by the user at any time to facilitate the overall understanding of the experiment.
- 6. The system is equipped with nitrogen interface, with UV automatic flame detection and automatic nitrogen fire extinguishing function, to further ensure the safety of the instrument.
- 7. After the end of the experiment, the system will automatically stop heating and start the fan to cool the flask, while waiting for the residual liquid in the condensing tube to return to the measuring cylinder room for use. The user only needs to follow the instructions to complete the experiment.
- 8. The experimental data will be automatically saved, the experimental report can be generated, the data can also be transferred with a U disk, and the USB printer can also be accessed print out the experiment report directly.
- 9. The instrument has the ability to connect the LIMS system and can be customized according to user requirements.
- 10. Dimensions: Width 520\* thickness 420\* height 620. Weight: 35kg.

### Main Parameters

- 1. Power: AC (  $220\text{V}\pm10\%$  ) V 10A 50Hz.
- 2. Power Consumption: <1500W
- 3. Flask Heating Furnace: 600W
- 4. Cold Bath Temperature:  $0\sim60^{\circ}\text{C}$
- 5. Receiving Room Temperature Control:  $13^{\circ}\text{C}\sim18^{\circ}\text{C}$
- 6. Distilled Liquid Volume:  $(0\sim100)\text{mL}\pm0.01\text{mL}$
- 7. Oil Steam Temperature: Room Temperature  $\sim400\pm0.1^{\circ}\text{C}$

