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1、TR-TC-6536 Distillation Apparatus





(Old style)

(New Style)

Summary

This instrument is designed and made as per standards GB/T6536 Test Method for Distillation Characteristics of Petroleum Products and ASTM D86 Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure. It is suitable to determine the distillation characteristics of gasoline, aviation gasoline, jet fuels, and solvent having special boiling point, naphtha, diesel oil, distillate fuels and similar petroleum products.

I. Main technical features

- 1. This instrument is desktop structure. The design is reasonable. It is easy to use.
- 2. It adopts a special heating furnace to ensure the safety. The heating power can be adjusted continuously.

3. The rising up and lowering down of distillation flask can be adjusted free by lifting device. Flexible and convenient to operate.



II. Main technical specifications

- 1. Power supply: AC(220±10%)V, 50Hz
- 2. Heating power: 1000W, continuous adjustment
- 3. Receiving cylinder: 100ml, scale division 1ml
- 4. Distillation flask: 125mL. It can meet requirements GB/T 6536 and ASTM D86
- 5. Thermometer: (-2 \sim 300) $^{\circ}{\rm C}$ and (-2 \sim 400) $^{\circ}{\rm C}$. Division value 1 $^{\circ}{\rm C}$

6. Flask support board: SiC, diameter for each hole is ϕ 32mm, ϕ 38mm and ϕ 50mm

7. Ambient temperature: Room temp. \sim +35 $^{\circ}$ C

8. Relative humidity: ≤85%

9. Maximum power consumption: 1100W

10.Dimension: 460mm×400mm×500mm

No.	Item	Unit	Qty	Remarks
1	Distillation flask (125 ml)	Piece	1	
2	Thermometer (-2~300) $^\circ\!{\rm C}$ 、(-2~400) $^\circ\!{\rm C}$,scale division is 1 $^\circ\!{\rm C}$	Piece	1 for each	
3	Glass container (Φ100mm×240mm)	Piece	1	
4	Silica gel stopper (3#, 4#)	Piece	2 for each	
5	Silicon carbide board, pore size Ø32mm、 Ø38mm、 Ø50mm	Piece	2 for each	
6	Graduated flask (100 ml)	Piece	1	
7	Iron weight	Piece	1	
8	Stopping ring for thermometer (1#)	Piece	4	
9	6 A fuse (Φ5×20)	Piece	2	
10	Observation window glass	Piece	1	
11	Condensate pipe outlet cover	Piece	1	

2、TR-TC-6536A Distillation Apparatus



Summary

This instrument is designed and made as per standards GB/T6536 Test Method for Distillation Characteristics of Petroleum Products and ASTM D86 Standard Test Method of Distillation for Petroleum Products at Atmospheric Pressure. It is suitable to determine the distillation characteristics of gasoline, aviation gasoline, jet fuels, solvent having special boiling point, naphtha, diesel oil, distillate fuels, and other petroleum products.

This instrument is not only suitable to the organizations of high frequency with various of samples but also accelerate the test speed for common users. It is an ideal distillation tester for petroleum products.

I. Main technical features

 The instrument adopts double units working mode, can do test for one sample as well as two samples which having the same specification or different specifications. It highly improves the work efficiency.
 It adopts two groups of independent digital temperature controller, heater, electric stirrer to constitute two

constant temperature baths. Each bath temperature can be adjusted and controlled independently. The temperature in the bath is uniform, can fully meet the requirements of test.

3. It adopts special heating furnace to ensure the safety of test. Heating power can be continuously adjusted to meet the requirements of test.

II. Main technical specifications

1. Power supply: AC(220±10%)V, 50Hz

2. Heating power: 1000W×2, continuously adjustable.

3.Receiving cylinder: 100ml, division value 1ml.

4.Distillation flask: 125ml, meet the requirements of GB/T 6536 and ASTM D86

5.Thermometer: (-2~300) $^{\circ}$ C and (-2~400) $^{\circ}$ C, division value 1 $^{\circ}$ C

6. Flask support board: SiC, bore diameter φ32mm, φ38mm, φ50mm.

7.Temperature controller: 1) Range: (Ambient +10) $^\circ C \sim$ 60 $^\circ C$

2) Accuracy: ±0.5℃

3) Display: LED

Note: The temperature control is to control the temperature of condensate in the condenser pipe.

8.Ambient temperature: ≤35 °C

9.Relative humidity: ≤85%

10.Maximum power consumption: 2200W

11.Dimension:760mm×520mm×500mm

No.	Item	Unit	Qty	Remarks
1	Distillation flask (125 ml)	Piece	2	
2	Thermometer $(-2 \sim 300)^{\circ}$ C 、 $(-2 \sim 400)^{\circ}$ C , scale division is 1° C	Piece	2 for each	
3	Glass container (Φ100mm×240mm)	Piece	2	
4	Silica gel stopper (3#)	Piece	4	
5	Silica gel stopper (4#)	Piece	4	
6	Silicon carbide board, pore size Φ32mm、 Φ38mm、 Φ50mm	Piece	2 for each	
7	Graduated flask (100 ml)	Piece	2	
8	Iron block	Piece	2	
9	Test platform (pad under the test vessel)	Piece	2	
10	10 A fuse (Φ5×20)	Piece	3	
11	Condensate pipe outlet cover	Piece	2	
12	Stopping ring for thermometer (1 #)	Piece	8	
13	Observation window glass	Piece	2	

3、TR-TC-6536B Distillation Apparatus



Summary

This instrument is designed and made as per standards GB/T6536 Test Method for Distillation Characteristics of Petroleum Products and ASTM D86 Standard Test Method of Distillation for Petroleum Products at Atmospheric Pressure. It is suitable to determine the distillation characteristics of gasoline, aviation gasoline, jet fuels, solvent having special boiling point, naphtha, diesel oil, distillate fuels, and other petroleum products.

This instrument is a kind of double-units instrument which the minimum temperature of the condenser pipe can reach 0° C.It is an ideal distillation tester for petroleum products under low temperature condition.

I. Main technical features

1. The instrument adopts low temperature and double units working mode. The minimum temperature can set to 0° C. It can do test for one sample or two samples at same time. It highly improves the work efficiency.

2. It adopts digital temperature controller, stainless-steel heater, new type refrigeration compressor and electric stirrer to constitute constant temperature bath. The temperature in the bath is uniform, can fully meet the requirements of test.

3. It adopts special designed structure, cooling speed is fast. The bath temperature can cool down from room temperature to 0° C within 50 minutes.

4. It adopts special heating furnace to ensure the safety of test. Heating power can be continuously adjusted to meet the requirements of test.

II. Main technical specifications

1.Power supply: AC(220±10%)V, 50Hz

- 2.Heating power: 1000W×2.
- 3. Receiving cylinder: 100ml, division value is 1ml.

4. Distillation flask: 125ml, meet the requirements of GB/T 6536 and ASTM D86

5.Thermometer:(-2~300) $^{\circ}$ C and (-2~400) $^{\circ}$ C. Division value 1 $^{\circ}$ C.

6.Flask support board: SiC, bore diameter is: Φ32mm, Φ38mm, Φ50mm.

7.Temperature controller:1) Range: 0°C ~60°C

2) Accuracy: ±0.5℃

3) Display: LED

Note: The temperature control is to control the temperature of condensate in the condenser pipe.

8.Ambient temperature: $\leq 30^{\circ}$ C

9.Relative humidity: ≤85%

10.Cooling system: New type refrigeration compressor

11.Maximum power consumption: 4000W

12.Dimension: 730mm×530mm×580mm

No.	Item	Unit	Qty	Remarks
1	Distillation flask (125 ml)	Piece	2	
2	Thermometer $(-2\sim300)^{\circ}$ C 、 $(-2\sim400)^{\circ}$ C , scale division is 1° C	Piece	2 for each	
3	Glass container (Φ100mm×240mm)	Piece	2	
4	Silica gel stopper (3#)	Piece	4	
5	Silica gel stopper (4#)	Piece	4	
6	Silicon carbide board, pore size Φ32mm、 Φ38mm、Φ50mm	Piece	2 for each	
7	Graduated flask (100 ml)	Piece	2	
8	Iron block	Piece	2	
9	Test platform (pad under the test vessel)	Piece	2	
10	10 A fuse (Φ5×20)	Piece	3	
11	Stopping ring for thermometer (1 #)	Piece	8	
12	Observation window glass	Piece	2	
13	Condensate pipe outlet cover	Piece	2	

4、 TR-TC-6536C Distillation Apparatus



Summary

The instrument is designed and made as per standards GB/T6536 Test Method for Distillation Characteristics of Petroleum Products and ASTM D86 Standard Test Method of Distillation for Petroleum Products at Atmospheric Pressure. It is suitable to determine the distillation characteristics of gasoline, aviation gasoline, jet fuels, special boiling point solvent, naphtha, diesel oil, distillate and similar petroleum products.

I. Main technical features

1. The electrics parts are controlled by controlling case.

2. The controlling case is made of cold rolled steel. It has an observation window and a built-in furnace. The electric part is at the lower section of the controlling case.

3. The furnace part is composed of SiC furnace base, heater of 1000W/220V, and SiC plate. The position of furnace can be adjusted by rotating the up and down knob on the controlling case, so that you can adjust the relative position of distillation flask and the opening of condensation tube. The heating power can be adjusted by rotating the voltage adjusting knob.

4. The refrigeration bath is made of stainless steel. It contains heating device, refrigeration device, temperature measuring device and stirring device. The stirring device is driven by a motor.

5. The dimension of condensation tube complies with GB/T6536.

II. Main technical specifications

1.Power supply: AC 220 V±10%, 50 Hz

2.Heating power: 1000 W

3.Receiving cylinder: 100 ml. Scale division 1 ml.

4.Distillation flask: 125 ml, as per GB/T6536 and ASTM D86.

5. Thermometer: Total immersion. They are from -2 to 300 $\,^\circ\!\!\mathbb{C}$ and from -2 to 400 $\,^\circ\!\!\mathbb{C}$. The scale divisions of them are 1 $\,^\circ\!\!\mathbb{C}$.

6. Flask support board: SiC. Diameters of holes are $\varphi32mm,\,38mm,\,and\,50mm.$

7.Temperature controller:

(1) Range: 0 °C to 60 °C
(2) Accuracy: ±0.5 °C
(3) Display: LED

8.Ambient temperature: ≤30 °C

9.Relative humidity: ≤85%

10.Refrigerated compressor: New-type refrigeration compressor

11.Maximum power consumption: 2500 W

Accessories:

No.	ltem	Unit	Qty	Remarks
1	Distillation flask (125 ml)	Piece	1	
2	Thermometer $(-2 \sim 300)^{\circ} C$, $(-2 \sim 400)^{\circ} C$, scale division is $1^{\circ} C$	Piece	1 for each	
3	Glass container (Φ100mm×240mm) Pi		1	
4	Silica gel stopper (3#)	Piece 2		
5	Silica gel stopper (4#)	Silica gel stopper (4#) Piece		
6	Silicon carbide board, pore size Φ32mm、 Φ38mm、Φ50mm	Piece	1 for each	
7	Graduated flask (100 ml)	Piece	1	
8	Iron block		1	
9	Test platform (pad under the test vessel)		1	
10	6 A fuse (Φ5×20)	Piece	2	
11	15A fuse (Φ5×20)	Piece	2	
12	Stopping ring for thermometer (1 #)	Piece	4	
13	Observation window glass	Piece	2	
14	Condensate pipe outlet cover	Piece	2	

$5\,{\scriptstyle\smallsetminus}\,$ TR-TC-6536D Automatic Distillation Apparatus



Summary

This instrument is designed and made as per standards GB/T 6536, GB/T 7534,ASTM D 86, ASTM D 850, ASTM D 1078. It is used to determine the distillation characteristics of motor gasoline, aviation gasoline, jet fuel, diesel oil, distillate fuel, naphtha, and some solvents which have special boiling points. It is a new instrument which is advanced and easy-operated. High cost performance.

I. Main technical features

1. Built-in microcomputer. Advanced IPC technology. 12.1 inch light-touch LCD. Man-machine dialog. Easy to operate.

2. Intelligent SCM control. The heating, cooling, distillate liquid level tracking, distillation rate control, recovered solution control, temperature recording, printing are all completed automatically.

3. It displays the vapor temperature curve, heater temperature curve and distillation rate curve in real time. Operator can judge whether the indications can meet the standards' requirements or not in real time.

4. Imported compressor and temperature sensor. Automatic liquid level tracking system. The test result are reliable and in good repeatability.

5. The suitable standards and distillation procedures can be added as per customer's need and different oil samples.

6. It has an automatic barometric pressure detecting function. The barometric correction can be completed automatically. The test result will not be influenced by the barometric pressure difference.

7. It can calculate the vapor temperature by inputting the residue amount after the test.

8. There is anti-freezing solution in the cold bath. A circulation stirrer is equipped inside. The liquid level sensor and overflow pipe will make the water leve in the bath normally.

9. It equips an automatic fire-extinguishing device to make the test safe.

II. Main technical specifications

- 1. Temperature range of bath: $(0 \sim 60)^{\circ}$ C
- 2. Temperature control precision of bath: $\pm 0.5^{\circ}C$
- 3. Temperature range of receiving chamber: $(0 \sim 60)^{\circ}$
- 4. Temperature control precision of receiving chamber: $\pm 1^{\circ}C$
- 5. Distillation heater: 1000W, 24V
- 6. Distillate liquid detection: $(0 \sim 100)$ mL, resolution 0.01mL
- 7. Distillate liquid detection precision: \leq 0.1mL

- 8. Power supply: AC(220±10%) V, 50Hz
- 9. Maximum power consumption: 2500W
- 10. Working environment: Ambient temp. (10 \sim 35)°C; RH \leq 80%
- 11. Dimension: 500 mm×530 mm×660 mm
- 12. Net weight: 85kg

No.	ltem	Unit	Qty	Remarks
1	15A fuse Φ6 × 30	Piece	2	
2	Steam temperature sensor	Piece	1	
3	Sensor positioning device	Set	1	
4	Oil receiving pipe	Piece	1	
5	Water receivingbowl	Piece	1	
6	Condenser tube cleaning pull rope	Piece	1	
7	Condenser rubber stopper	Piece	2	
8	Condenser envelope	Piece	1	
9	Observation window	Piece	1	
10	Flask plate (quartz) Aperture Φ38, Φ50	Piece	1 for each	
11	Fire trachea (Φ8 PU tube, L = 3m)	Set	1	
12	Power line	Piece	1	
13	Electric furnace bracket casing	Piece	6	
14	Diversion shovel	Piece	2	
15	Cylinder 100ml	Piece	1	
16	Cylinder base	Piece	1	
17	Flask (quartz) 125ml	Piece	1	

18	Cylinder 5mL	Piece	1	
19	Ο type ring Φ21.5 × 2.65	Piece	2	Used for cylinder base
20	Ο type ring Φ12 × 2.65	Piece	2	For the sensor positioning device
21	Micro-printer (data cable, power line)	Set	1	

Product Package:

