



NIK ABZAR  
Laboratory Instrumentation



## ASTM D1160

Distillation of Petroleum Products at Reduced Pressure



### Instrument introduction

The VAC DIST 401 is an easy to use ASTM D1160 Semi-automatic Vacuum Distillation Apparatus for the distillation of petroleum products.

7 inch control automates the D1160 test from beginning to end. beginner and experienced operators will find this system simple to use. The software steps you through the testing process from start up to printing of results.

Easy to understand software and easy access to all the distillation components makes performing the test as simple as possible.

This unit uses for all types of crude oil, residue or lubricating cuts distillation from boiling temperatures up to 350°C under vacuum pressure. As well as, vacuum down to 0.1 mmHg, the atmospheric equivalent temperature (AET) of 600-650°C.



### Cold trap without using dry ice

immersion coolers use for Cold trap with an approximate temperature of (-30... -40 °C), mounted between the top of the condenser and the vacuum source to recover the light boiling components.



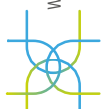
### Safety

When the temperature rises above the limit (350 °C Vapor temperature Or 400 °C distilling flask temperature ) According to the standard ASTM D1160 , system stops. Also this case important in terms of for more safety. vacuum can be release automatically by user in end of test or during test.



### Setup parameter and show on display

The vacuum level, bath temperature and Cold trap temperature are Adjustable by the user. Vapor temperature, distilling flask temperature , Cold trap temperature , Condenser Temperature and vacuum level are displayed On 7" display.

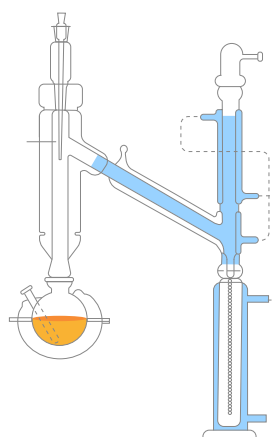


## SPECIFICATIONS

<b>Ordering Information</b>	
	Model VAC DIST 401 Semi-automatic vacuum Distillation
<b>Standard Test Method</b>	
	ASTM D1160
<b>Performance</b>	
<b>Vacume control system</b>	The ability to adjust the vacuum pressure up to 0.1 mmHg
<b>Condenser Temperature Control:</b>	0° to 80°C ( ±0.1 °C) operating temperature - liquid jacket
<b>TEMP &amp; Volume Measurement</b>	It is record user by touching the screen of the monitor from IBP up to FBP
<b>Cold trap</b>	Cold trap to recover the light boiling components , the temperature of the trap –40 °C
<b>Data transfer &amp; Save</b>	The results of each analysis can be print include (temperature, Volume, pressure, AET) and transferred to USB – number save result in system unlimited
<b>Measurements</b>	
<b>Temperature</b>	Measurement with pt-100 class A up to 450 °C
<b>Pressure</b>	Measurement by high precise capacitive pressure sensor
<b>Heater</b>	2000W power
<b>DISPLAY</b>	
<b>7" touch screen</b>	user interface with– Microprocessor control system
<b>Physical</b>	
<b>Electrical Requirements</b>	220 VAC - 3000 watts, 50/60 Hz
<b>Dimensions</b>	90 cm W x 63 cm D x 86 cm H (35.4 x 24.8 x 33.8 inches)
<b>Weight</b>	70 kg (155 lbs)



VAC DIST 401: EASY TO USE ,HIGHLY PRECISE, RELIABLE





USB

Printer

7 inch

1-7 inch Color Display

2-Printer

3-USB Port

4-Key ON/Off

5-Coolant level

6-Light

7-Receiver

8- Heater and Elevator

9-Flask 500 ml

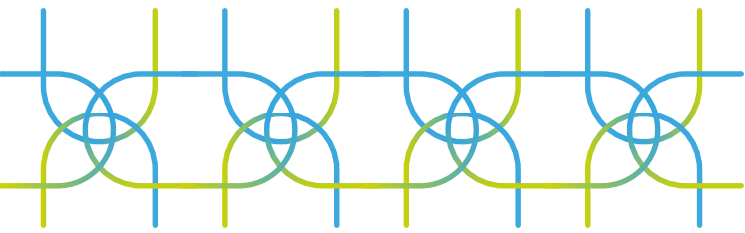
10-PT 100-Oil temp

11-Vacuum-jacketed Column

12-PT 100 glass -Vapor temp

13-Cold trap





**Produce By Nik Abzar Company**



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