

Petroleum Measurement Tables (ASTM D 1250)

Overview

ASTM 1250 brings hundreds of pages of the Petroleum Measurement Tables Volumes I, II, III, IV, V, VI, VII, VIII, IX (Tables 5A, 5B, 6A, 6B, 6C, 23A, 23B, 24A, 24B, 24C, 53A, 53B, 54A, 54B, 54C) for easy and fast usage to your PC.

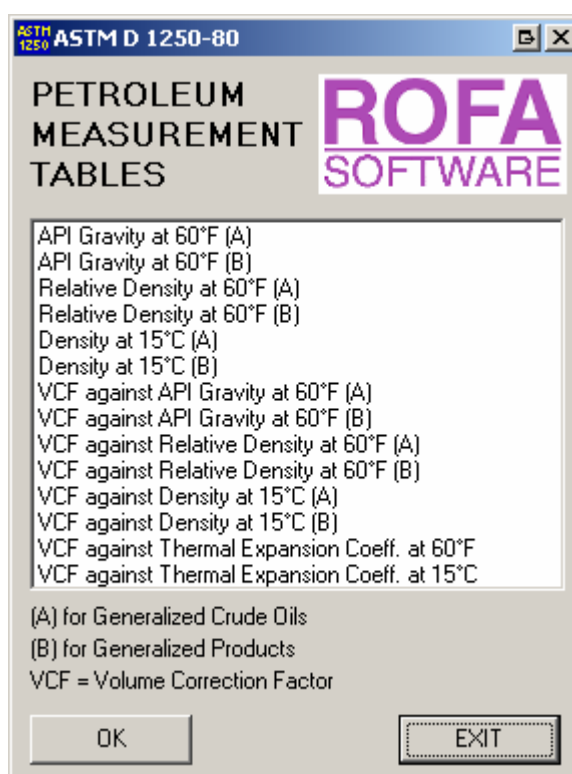
Installation

Create a new folder on your harddisk (i.e. ASTM1250) and copy the files “ASTM1250.exe” and “ASTM1250.dll” into the new folder. The Visual Basic 6 Runtime files must be installed on your computer.

Start

After starting “ASTM1250.exe” you will see a list of available Petroleum Measurement Tables:

- API Gravity at 60°F (A)
Table 5A: Generalized Crude Oils, Correction of Observed API Gravity to API Gravity at 60°F
- API Gravity at 60°F (B)
Table 5B: Generalized Products, Correction of Observed API Gravity to API Gravity at 60°F
- Relative Density at 60°F (A)
Table 23A: Generalized Crude Oils, Correction of Observed Relative Density to Relative Density 60/60°F
- Relative Density at 60°F (B)
Table 23B: Generalized Products, Correction of Observed Relative Density to Relative Density 60/60°F
- Density at 15°C (A)
Table 53A: Generalized Crude Oils, Correction of Observed Density to Density at 15°C
- Density at 15°C (B)
Table 53B: Generalized Products, Correction of Observed Density to Density at 15°C
- VCF against API Gravity at 60°F (A)
Table 6A: Generalized Crude Oils, Correction of Volume to 60°F Against API Gravity
- VCF against API Gravity at 60°F (B)
Table 6B: Generalized Products, Correction of Volume to 60°F Against API Gravity at 60°F



- VCF against Relative Density at 60°F (A)
Table 24A: Generalized Crude Oils, Correction of Volume to 60°F Against Relative Density 60/60°F
- VCF against Relative Density at 60°F (B)
Table 24B: Generalized Products, Correction of Volume to 60°F Against Relative Density 60/60°F
- VCF against Density at 15°C (A)
Table 54A: Generalized Crude Oils, Correction of Volume to 15°C Against Density at 15°C
- VCF against Density at 15°C (B)
Table 54B: Generalized Products, Correction of Volume to 15°C Against Density to 15°C
- VCF against Thermal Expansion Coeff. at 60°F
Table 6C, Table 24C: Volume Correction Factors for Individual and Special Applications, Volume Correction to 60°F Against Thermal Expansion Coefficients at 60°F
- VCF against Thermal Expansion. Coeff. at 15°C
Table 54C: Volume Correction Factors for Individual and Special Applications, Volume Correction to 15°C Against Thermal Expansion Coefficients at 15°C

Select the list item you need and press the “OK” button.
To exit the program press the “EXIT” button.

If you have selected on of the first six list items you will see a new screen which caption shows the used table. Enter the density (API Gravity, Relative Density or Density) and the temperature (°F or °C) into the according input fields. If you don't want to use Glass Hydrometer Correction uncheck the checkbox. After pressing the “Calculate” button the input parameters are rounded according to ASTM 1250 and the density at standard temperature (60°F or 15°C) is shown. A message on the bottom of the screen informs you if the input parameters are not within the limits of the table or if the result is in the extrapolated region of the table. To return to the main screen press the “Back” button.

The screenshot shows a software window titled "Table 53A" with the following content:

Generalized Crude Oil

Density [kg/m³] at °C

Glass Hydrometer Correction

Density [kg/m³] at 15°C

If you have selected on of the seventh to the twelfth list items you will see a new screen which caption shows the used table. Enter the density (API Gravity, Relative Density or Density) at standard temperature (60°F or 15°C) and the temperature (°F or °C) into the according input fields. After pressing the “Calculate” button the input parameters are rounded according to ASTM 1250 and the Volume

Generalized Products	
API Gravity at 60°F	41.1
°F	39.9
<hr/>	
VCF (Vol.corr.factor)	1.0099
<hr/>	
Calculate	Back

Correction Factor is shown. A message on the bottom of the screen informs you if the input parameters are not within the limits of the table or if the result is in the extrapolated region of the table.

To return to the main screen press the “Back” button.

If you have selected on of the last two list items you will see a new screen which caption shows the used table. Enter the Thermal Expansion Coefficient (in 1/°F or 1/°C) and the temperature (°F or °C) into the according input fields. After pressing the “Calculate” button the input parameters are rounded according to ASTM 1250 and the Volume

Table 54C	
Thermal expansion coeff. [1/°C]	0.000753
°C	40.75
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VCF (Vol.corr.factor)	0.98050
<hr/>	
Calculate	Back

A message on the bottom of the screen informs you if the input parameters are not within the limits of the table or if the result is in the extrapolated region of the table.

To return to the main screen press the “Back” button.