

DATA SHEET

Vacuum Degassing Oven VDO



Vacuum Degassing Oven VDO 81-PV2610

General description

Most Standards make degassing oven of the PAV-aged asphalt samples mandatory. The Vacuum Degassing Oven (VDO) is designed to remove air bubbles created during accelerated oxidative ageing of asphalt binder by the PAV. This final conditioning makes the aged binder suitable for further tests such as BBR, DSR, penetration, ductility, softening point and many more.

The apparatus consists of a stainless vacuum vessel with encased band heaters and integral vacuum and temperature controls. A platinum RTD measures internal test temperature to $\pm 0.1^{\circ}\text{C}$. Selectable test temperatures (from ambient to 200°C) are controlled to $\pm 4.0^{\circ}\text{C}$.

The **Vacuum Degassing Oven VDO** can be used as part of your **Superpave performance based testing** program.

Vacuum is provided by an integrated vacuum system and monitored by a pressure transducer and controlled to achieve 15 kPa absolute pressure. Temperature and vacuum are indicated both as set points and as actual values on the 6" digital color touch screen display. Temperature and vacuum calibration can be site executed. Data logs of both temperature and vacuum are saved on USB stick or transferred to PC at the end of the test.

The vacuum chamber can accept either eight 55x35 mm or four 70x45 mm (available as accessories) sample containers. The instrument is supplied complete with temperature traceable calibration certificate, 8 aluminium 55x35 mm sample containers, a double face sample holder and operator's manual.

Main features

- Platinum RTD temperature internal measurement to $\pm 0.1^{\circ}\text{C}$
- Selectable test temperature (from ambient to 200°C) controlled to $\pm 4.0^{\circ}\text{C}$
- Integrated vacuum pump
- Vacuum monitored by transducer and controlled to 15 ± 0.1 kPa absolute pressure
- Digital touch screen 6" display for temperature, vacuum, set points and actual values
- Reclining display allowing view from any angle
- Over temperature limit switch

DATA SHEET

Standards

- ASTM D6521
- EN 14769
- AASHTO R28

Specifications

Working temperature range: ambient to 200° C

Temperature measurement: Platinum RTD with +/- 0.1° C resolution

Pressure measurement: pressure transducer with +/- 1 kPa resolution

Power: 600 W

Dimensions, mm (L x w x h): 430 x 440 x 480

Weight (approx.): 30 kg



Pressure Ageing Vessel PAV and Vacuum Degassing Oven VDO



Double face sample rack positioning

DATA SHEET



Set of eight 55x35 mm sample container 81-PV2610/1



Set of four 70x45 mm sample container 81-PV2610/2

Products

81-PV2610

Vacuum Degassing Oven (VDO) - meets AASHTO R28, ASTM D6521 and EN 14769 test standards - 230V, 50-60Hz, 1Ph

81-PV2610/Z

Vacuum Degassing Oven (VDO) - meets AASHTO R28, ASTM D6521 and EN 14769 test standards - 110V, 60Hz, 1Ph

Accessories and consumables

81-PV2610/1

Sample containers 55x35 mm - set of 8 pcs.

81-PV2610/2

Sample containers 70x45 mm - set of 4 pcs.