



Pressure Aging Vessel - PAV

CRT-PAV1

Cooper Research Technology's New Generation Pressure Aging Vessel (CRT-PAV1) uses heated, pressurised air to simulate long-term oxidative aging of asphalt binders. The PAV consist of an ASME Boiler and Pressure Vessel Code and CE certified stainless steel pressure vessel, steel cabinet with encased band heaters, and integral pressure measurement control. This state of the art system meets ASTM D6521, AASHTO R28, and EN 14769 requirements and includes a platinum RTD device to ensure accurate temperature resolution and uniformity. A pressure relief valve and high- temperature thermal shut-down are included as standard safety features. A USB port located on the front of the unit allows the user to easily store test data and upgrade software if necessary. The CRT-PAV1 Pressure Aging Vessel uses a Touch-screen controller with front panel user interface for complete control and monitoring of all test processes. The system has an operating pressure range of $2.1 \pm 0.1\text{mPa}$ and temperature range of $80^{\circ}\text{--}115^{\circ}\text{C}$, with resolution of 0.1°C . This easy-to-use system completes a test in three easy steps:

- Set the temperature and pressure
- Insert Specimens
- Press the start button

The CRT-PAV1 includes a set of ten TFOT specimen pans, a precision anodized aluminum sample holder with lifting handle, and a specimen handling tool. Additional TFOT pans can be ordered as necessary. Bottled compressed air with a pressure of at least 325psi (2.24mPa) and a regulator must be sourced locally.

Standards

- EN 14769
- ASTM D6521
- AASHTO R28

Key Features

- State-of-the-art system meets ASTM D6521, AASHTO R28, and EN 14769 requirements
- Includes touch screen controller with front panel user interface with easy to use step-through operation
- Bench top unit with integral vessel/oven design with top opening door
- CE certified vertical stainless steel pressure vessel with encased band heaters and integral pressure measurement and control
- Thermo Regulation: Proportional control with integral and derivative function
- Platinum RTD Temperature measurement
- Includes 10 specimen pans
- Precision anodized aluminum sample holder
- Includes specimen handling tool

Software

The CRT-PAV1 Pressure Aging Vessel uses an easy to use Touch-screen controller with front panel user interface for complete control and monitoring of all test processes.

Accessories

Accessories are not included in the price of main device (unless stated otherwise) and may be purchased separately if required.

CRT-PAV1-PAN	Stainless Steel Specimen Pan
CRT-PAV1-PANG	Specimen Pan Rank Gripper
CRT-PAV1-PANR	Specimen Rack and Handle
CRT-PAV1-SWG	Spiral Wound Gasket
CRT-PAV1-VERIF-KIT	- Handheld Pt100 Thermometer - Digital Pressure Gauge - Wing Screw, M4x20mm - Wing Screw, M4x30mm - Calibration Cube - Calibration Test Hose
CRT-PAV1-VERIF-KIT-UKAS	UKAS Calibration - Handheld Pt100 Thermometer - Digital Pressure Gauge - Wing Screw, M4x20mm - Wing Screw, M4x30mm - Calibration Cube - Calibration Test Hose
CRT-EXT-COMPR	Extreme 3/30 12/24V Compressor

Specifications

Technical specifications are subject to change without notice.

Dimensions mm (W x D x H) 750 x 545 x 660

Weight (approx.) Kg 120

Electrical Supply 110 or 230 Volts, 50/60 Hz @ 13A

Calibration & Maintenance

Calibration, Annual Service and Maintenance Contracts are available for this device. Please enquire for further details. Note: This device should be checked and calibrated annually.

Datasheet Version: 19.09/03