

DATA SHEET

Asphalt Prism Shearbox Compactor PReSBOX



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General description

The PReSBOX[®] provides the latest in asphalt specimen preparation and mix evaluation technology. PReSBOX[®] produces high quality asphalt prisms from which beams and cylinders with excellent air voids distribution, homogeneity and particle orientation can be cut.

The unique shearing action of the PReSBOX[®] closely replicates the conditions under which asphalt is placed in the field and produces specimens with excellent homogeneity and volumetric properties, giving an exceptional measure of workability.

The PReSBOX[®] also provides an accurate measure of the workability (relative effort required for compaction) of Hot Mix Asphalt (HMA) needed in the field to achieve a target void content.

The PReSBOX[®] Shearbox Compactor features a PC interface for user entry of compaction parameters, and provides a real-time graphic display of data, e.g. specimen height, vertical stress and air voids per cycle.

Main features

- The PReSBOX produces a prismatic specimen with nominal dimensions of 450 mm (length) x 150 mm (width) x 120 to 185 mm (height)
- Asphalt prisms prepared in the PReSBOX compactor can be sawn or cored to produce 4-6 prismatic beams or 1-4 cylindrical specimens
- The PReSBOX can be operated by a single person
- Produces specimens with excellent air void distribution and particle orientation
- Designed for an easy unlocking of the compaction mould, facilitating an effortless specimen extraction at safe height, handling and user safety

Standards

- ASTM D7981

DATA SHEET

Specifications

Shearing motion: Electromechanically driven at 4°

Vertical stress: Pneumatic user defined up to 2 MPa

Specimen size: 450 x 150 x 120 - 185 mm (l x w x h)

Integrated specimen extruder

Specimen Loading: Easy loading with included accessory kit (includes: distribution chute, levelling tool & comb)

Compaction Frequency: 3.7 cycle/min +/- 16 s/cycle

Mould hardness: 50 Rockwell C (minimum)

Platen hardness: 50 Rockwell C (minimum)

Mould surface: finish smoother than 1.6 µm

Loading platen size: 448 x 149 mm (L x w)

Loading platen finish: smoother than 1.6 µm

Numbers of cycles: user definable (unlimited)

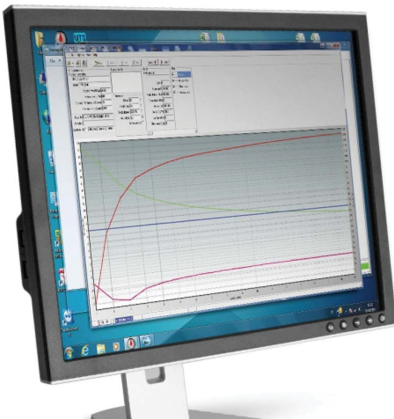
Air supply: clean dry air supply at minimum 600 kPa

Size (h x w x d): 1540 x 1765 x 1050 mm

Weight: 1100 kg



Heater for PR5BOX



Software detail

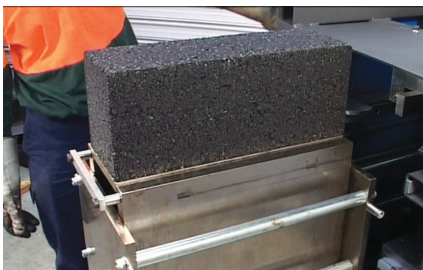
DATA SHEET



Charging the compaction mould with loose asphalt



Commencing the test



Removing the sample

Products

77-PV46A02

IPC Global PReSBOX - Shearbox Compactor - 208-240V / 50-60Hz / 1ph.

Accessories and consumables

DATA SHEET

77-PV46202

Heater to pre-heat the box walls. 230V/50-60Hz/1ph

77-PV46204

Heater to pre-heat the box walls. 110V/60Hz/1ph

79-PV71102

Pneumatic Filtration Kit - Wall Mount 12 Bar