

QUICKLY AND EASILY REPLICATES FIELD COMPACTION

Asphalt researchers are aware of the importance of creating representative samples for laboratory performance testing. The precise shearing motion of the **Asphalt Shear Box Compactor (ASC)** which meets ASTM 7981 can quickly and easily replicate samples that are more representative of field compaction.

The ASC compacts large asphalt prisms that can be sawn to produce four to six beams or cored to produce three to four 100mm diameter AMPT samples. The electronic control unit with touch screen color display operates like a standard Windows based PC for management and analysis of data and test results. The user friendly touch-screen interface allows for easy set up, fully automatic test execution, data acquisition/processing, reporting, and data file generation.

A LAN connection to Intranet/Internet enables remote communication to receive immediate diagnostic analysis, software updates, or technical support from InstroTek.



ASC™ Asphalt Shear Box Compactor

ADVANTAGES

- ▶ Meets ASTM D7981
- ▶ Extremely sturdy frame combined with precision machined components
- ▶ Servo hydraulic vertical ram with integrated hydraulic power supply
- ▶ Precision electro-mechanical shearing motion
- ▶ Integrated specimen extruder
- ▶ Electronic control unit with touch screen color display (no need for PC)
- ▶ Unlimited memory storage with: 2 USB ports, 1 SD card slot, RS232/485 serial port
- ▶ The compaction cycle can be programmed for vertical stress/load and test termination conditions (number of cycles, specimen height and/or density)
- ▶ ASC can be equipped with a load cell for shear stress measurement, upon request

SPECIFICATIONS

Vertical force	Up to 100kN
Shearing force	Up to 50kN
Shear angle	4° ± 0.1°
Shearing cycle rate	3 ± 0.1 gyrations per minute
Mould width	150mm ± 0.1mm
Mould length	450mm ± 0.1mm
Mould surface finish (inside)	Smoother than 0.4µm rms
Mould surface hardness	More than 48 Rockwell C
Mould capacity	Approx. 20 litres
Loading platen width	149mm ± 0.2mm
Loading platen length	449mm ± 0.2mm
Loading platen smoothness	Smoother than 0.4µm rms
Loading platen surface hardness	More than 48 Rockwell C
Number of cycles	Up to 100
Vertical stress	0.1 to 1.5MPa ± 0.01MPa
Compaction height	45mm to 185mm ± 0.1mm
Power supply	230V 1ph 50/60Hz 20Amps
Dimensions	788x1360x(H)1314mm
Weight	1200 kg