

Manual Compression Testing Machine

PCTE offers 600kN and 1500kN capacity Manual Compression Testing Machines. They are produced to perform reliable compression tests on concrete specimens especially suitable for on-site applications when electric power supply is unavailable.

Being a cheaper alternative, the UTEST-made manual testing series incorporates the exclusive design of the manual power pack, with precision and simplicity. It is hand operated and allows even an inexperienced operator to complete excellent compression and flexural tests on-site.

The UTC-4010 and UTC-4110 are supplied in Class 1 starting from 10% of the full range as per the ASTM C-39 standard. With their remarkable performance, the UTC-4010 and UTC-4110 are a reliable and practical solution for remote site locations where electrical power is unreliable, or non-existent. The compression machines consist of a heavy duty welded frame, hydraulic power pack and data acquisition system LPI.



Components

600kN Testing Machine is supplied complete with:

- $\varnothing 165 \times 90$ mm, $\varnothing 165 \times 50$ mm, $\varnothing 165 \times 30$ mm and $\varnothing 165 \times 15$ mm distance pieces
- UTC-4511 upper Platen (with ball seating assembly) $\varnothing 165$ mm, Lower Platen $\varnothing 165$ mm.

UTC-4510 upper and lower platen sets can also be used with UTC-4010 testing machine.

1500kN Testing Machine is supplied complete with:

- $\varnothing 165 \times 90$ mm, $\varnothing 165 \times 50$ mm, $\varnothing 165 \times 30$ mm and $\varnothing 165 \times 15$ mm distance pieces
- UTC-4512 upper Platen (with ball seating assembly) $\varnothing 216$ mm, Lower Platen $\varnothing 216$ mm.

UTC-4510, UTC-4511 and UTC-4515 upper and lower platen sets can also be used with UTC-4110 testing machine.

Technical Specifications

Models	UTC 4010	UTC 4110
Capacity	600 kN	1500 kN
Dimensions(mm)	590x500x800	680x500x930
Lower Platen dimensions	$\varnothing 165$ mm	$\varnothing 216$ mm
Upper Platen dimensions	$\varnothing 165$ mm	$\varnothing 216$ mm
Roughness value of platens	3.2 μ m	3.2 μ m
Vertical Clearance	230 mm	320 mm
Piston Diameter	150mm	230mm
Maximum piston movement	50 mm	50 mm
Standard	ASTM C39	ASTM C39
Oil capacity	12 litre	12 litre
Maximum working pressure	340 bar	362 bar
Weight	385 kg	590 kg

About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

- NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing
- Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal
- Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclometers, Extensometers, Tiltmeters, Load Cells and Dataloggers