



## Product Code

UTS-1101	100 kN (22 500 lbf) Plate Loading Digital Test Set
UTS-1102	200 kN (45000 lbf) Plate Loading Digital Test Set
UTS-1105	500 kN (112400 lbf) Plate Loading Digital Test Set
UTS-1108	Digital Deflection Measurement Assembly for Plate Loading Test Sets
UTS-1109	Additional Bar to extend total length up to 5.5 meters
UTS-1111	100 kN (22500 lbf) Plate Loading Test Set with Displacement Transducers and Data Logger
UTS-1112	200 kN (45000 lbf) Plate Loading Test Set, with Displacement Transducers and Data Logger
UTS-1115	500 kN (112400 lbf) Plate Loading Test Set, with Displacement Transducers and Data Logger
UTS-1118	Electronic Deflection Measurement Assembly for Plate Loading Test Set
UTS-1133	Loading Plate, Ø152 mm (6"), for Plate Loading Test
UTS-1134	Loading Plate, Ø160 mm (6,3"), for Plate Loading Test
UTS-1135	Loading Plate, Ø10" (254 mm), for Plate Loading Test
UTS-1136	Loading Plate, Ø305 mm, (12") for Plate Loading Test
UTS-1137	Loading Plate Ø 457 mm (18") for Plate Loading Test
UTS-1138	Loading Plate Ø 610 mm (24") for Plate Loading Test
UTS-1139	Loading Plate Ø 762 mm (30") for Plate Loading Test
UTS-1140	Additional Plates Set for Plate Loading Test, ASTM (Ø457 mm/18", Ø610 mm/24" and Ø762mm/30" plates)
UTGE-3810	700 bar Manual (Hand Operated) Pressure Equipment
UTGE-3811	600 bar Manual (Hand Operated) Pressure Equipment

Plate load test sets can be used to determine the ultimate bearing capacity of subgrade soils and compacted pavement components. Plate load tests provide data for use in the evaluation and design of rigid and flexible-type airport and highway pavements.

The test is performed by pressing a steel bearing plate into the layer to be measured by the help of a hydraulic jack and measuring the resulting deformation taking place on the layer. This deformation value can also be used to obtain modulus of subgrade reaction which can be correlated to resilient modulus as proposed by "1993 AASHTO Guide for Design of Pavement Structures"

Utest provides two models, one digital and one electronic for plate load testing sets. Both models have 3 different capacities: 100 kN (22 500 lbf), 200 kN (45 000 lbf) and 500 kN (112400 lbf)

All test set supplied with a wooden carrying case.

UTS-1109 Additional Bar to extend total length up to 5.5 meters of measuring bar of plate loading test sets should be ordered.

And also, UTS-1140 Additional Plate Set for 500 kN Plate Loading Test (UTS-1105 or UTS-1115) should be ordered. UTS-1140 which packed in a separate wooden box consists of Ø457mm/18"; Ø610mm/24" and Ø762mm/30" plates.

## Standards

ASTM D1195, D1196; BS 1377:9



UTS-1112



Detail of UTS-1102



Detail of UTS-1112

Product Code	Dimensions (mm)	Weight (approx.)	Product Code	Dimensions (mm)	Weight (approx.)
UTS-1101	370x1330x570	50 kg	UTS-1118	450x2600x230	8 kg
UTS-1102	370x1330x570	54 kg	UTS-1133	160x170x50	3,50 kg
UTS-1105	80x1130x80	60 kg	UTS-1134	160x180x50	4,50 kg
UTS-1121	200x950x300	43 kg	UTS-1136	310x370x50	15 kg
UTS-1122	300x1050x300	47 kg	UTS-1137	460x530x50	34 kg
UTS-1125	350x1100x300	53 kg	UTS-1138	700x700x50	60 kg
UTS-1108	450x2600x240	8 kg	UTS-1139	850x850x50	94 kg
UTS-1109	30x100x60 mm	8 kg	UTS-1140	850x850x50	187 kg

## UTS-1101

100 kN Plate Loading Digital Test Set	100 kN Hydraulic Equipment with Fittings (UTS-1121)	100 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Digital Deflection Measurement Assembly (UTS-1108)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level 3 pcs. 25 x 0.01mm digital dial gauges (UTGM-0148) with dial supports

## UTS-1102

200 kN Plate Loading Digital Test Set	200 kN Hydraulic Equipment with Fittings (UTS-1122)	200 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Digital Deflection Measurement Assembly (UTS-1108)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level 3 pcs. 25 x 0.01mm digital dial gauges (UTGM-0148) with dial supports

## UTS-1105

500 kN Plate Loading Digital Test Set	500 kN Hydraulic Equipment with Fittings (UTS-1125)	500 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Digital Deflection Measurement Assembly (UTS-1108)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level 3 pcs. 25 x 0.01mm digital dial gauges (UTGM-0148) (UTB with dial supports)

## UTS-1111

100 kN Plate Loading Digital Test Set	100 kN Hydraulic Equipment with Fittings (UTS-1121)	100 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Electronic Deflection Measurement Assembly (UTS-1118)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level
		3 pcs. 25 x 0.01 mm digital dial gauges with dial supports
		Interface unit with 4 channel for data acquisition (UTCU-0320), converter DC 12 V to DC 24V and UTEST software. PC is not included and have to be ordered separately

## UTS-1112

200 kN Plate Loading Digital Test Set	200 kN Hydraulic Equipment with Fittings (UTS-1122)	200 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Electronic Deflection Measurement Assembly (UTS-1118)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level
		3 pcs. 25 x 0.01 mm digital dial gauges with dial supports
		Interface unit with 4 channel for data acquisition (UTCU-0320), converter DC 12 V to DC 24V and UTEST software. PC is not included and have to be ordered separately

## UTS-1115

500 kN Plate Loading Digital Test Set	500 kN Hydraulic Equipment with Fittings (UTS-1125)	500 kN hydraulic cylinder, 3 pcs. extension rods with different length
		Hydraulic hand pump (with pressure transducer, readout unit and 2 m (6,56 ft) flexible hose with quick release coupling)
		Ø152 mm (6") and Ø305 mm (12") loading plates
	Electronic Deflection Measurement Assembly (UTS-1118)	2,5 m (8,2 ft) measuring bar with base supports,. plump, spirit level
		3 pcs. 25 x 0.01 mm digital dial gauges with dial supports
		Interface unit with 4 channel for data acquisition (UTCU-0320), converter DC 12 V to DC 24V and UTEST software. PC is not included and have to be ordered separately