

CONSOLIDATION TEST			
	Analog Version	Digital Version with Geotronic	Digital Version with UDA (page 100)
OEDOMETER	T 663/020		
LOAD CELL 20 cm ² + WEIGHTS 64 kg	T 661 + T 661/10		
LOAD CELL 40 cm ² + WEIGHTS 128 kg	T 661/1 + T 661/11		
LOAD CELL 44,16 cm ² + WEIGHTS 160 kg	T 661/4 + T 661/12		
LOAD CELL 50 cm ² + WEIGHTS 160 kg	T 661/2 + T 661/12		
LOAD CELL 100 cm ² + WEIGHTS 160 kg	T 661/3 + T 661/13		
BENCH FOR OEDOMETER	T 663/050		
Single place bench (1 st module)	T 663/060		
Extension bench (single place)	T 662		
alternative: Three place bench			
STRAIN MEASUREMENT	T 628/E1	AD 113/011 alt. AD 100/011 AD 002	AD 113/011 alt. AD 100/011
Dial gauge: 10 mm (0.01) Transducer 10 mm (0.002 alt. 0.001) Geotronic			
DATA ACQUISITION		AD 021/010 AD 021/012*	AD 308 and multiples of 8 channels
Multiplexer for linking in a network Network cable (10 m long) Cable extension (10 m long) 3-way connector block Acquisition software		AD 021/003 AD 050/001	AD 021/015*** AD 050/001
PROCESSING DATA		AD 225/007 AD 225/008	
"Oedometric test" software "CV e K determination" software			

DIRECT SHEAR TEST			
	Analog Version	Digital Version with Geotronic	Digital Version with UDA (page 100)
TEST APPARATUS	T 665/N		
BOX 60 x 60 mm - 36 cm ² + MOULD + WEIGHTS (31.5 kg) BOX dia. 67.7 mm - 36 cm ² + MOULD + WEIGHTS (31.5 kg) BOX dia. 63.5 mm - 31 cm ² + MOULD + WEIGHTS (31.5 kg) BOX 100 x 100 mm - 100 cm ² + MOULD + WEIGHTS (78.75 kg) Adaptor for fitting the smaller boxes in the large housing of T 666/1	T 666 + T 666/A + T 660/6 T 666/4 + T 666/D + T 660/6 T 666/2 + T 666/5 + T 660/6 T 666/1 + T 666/B + T 660/7 T 666/12		
LOAD MEASURING	BB 003 alt. BA 003 BB 006 alt. BA 006	AP 032/005 AD 002	AP 032/005
Load ring: 3 kN (boxes T 666 - T 666/2 - T 666/4) Load ring: 6 kN (box T 666/1) Electric load cell: 5 kN Geotronic			
STRAIN MEASUREMENT **	T 628/E1 T 628/E	AD 115/026 (x 2) AD 002 (x 2)	AD 115/026 (x 2)
Dial gauge: 10 mm (0.01) - vertical Dial gauge: 30 mm (0.01) - horizontal Transducer 25 mm (0.01) Geotronic			
DATA ACQUISITION		AD 021/010 AD 021/012* AD 021/003 AD 050/001	AD 308 and multiples of 8 channels AD 021/015*** AD 050/001
Multiplexer for linking in a network Cable (10 m long) Cable extension (10 m long) 3-way connector block Acquisition software			
PROCESSING DATA		AD 225/005 AD 225/006	
"Direct shear" software "Residual shear" software			

* not necessary for a single AD 021/003

** Digital dial gauge (0.01 mm) without data acquisition
DV 923/10 - 10 mm travel; DV 923/30 - 30 mm travel

*** At least one cable extension for each transducer.

TRIAXIAL TEST (UU.CU.CD)			
Minimum configuration, comprising one triaxial cell			
	Analog Version	Digital Version with Geotronic	Digital Version with UDA (page 100)
LOAD FRAME (50 kN structure)	TR 115		
Optional bench in completion	TR 115/B		
MEASURING INSTRUMENT FOR LOAD AND STRAIN Load ring: 2 kN Dial gauge: 30 mm (0.01 mm) Load cell: 5 kN Geotronic Transducer 25 mm (0.01) Geotronic	BB 002 alt. BA 002 T 628/E	AP 032/005 AD 002 AD 115/026 AD 002	AP 032/005 AD 115/026
CELL AND ACCESSORIES Triaxial cell Pedestal Top cap with drainage Base disc Suction sleeve stretcher Membrane (30 pieces) O-ring (30 pieces) Porous disc (<i>not necessary for UU test</i>) Filter drain (50 pieces) (<i>not necessary for UU test</i>)	Dia. 38.1 mm * TR 205 * TR 205/001 * TR 205/002 * TR 205/003 TR 205/006 TR 205/007 TR 205/018 * TR 205/009 (x 2) TR 205/010	Dia. 50 mm * TR 205 * TR 205/041 * TR 205/042 * TR 205/043 TR 205/036 TR 205/037 TR 205/038 * TR 205/049 (x 2) TR 205/040	Dia. 100 mm * TR 207 * TR 207/011 * TR 207/012 * TR 207/013 TR 207/006 TR 207/017 TR 207/018 * TR 207/019 (x 2) TR 207/020
SAMPLE PREPARATION Sampler Rack and pinion sample extruder bench model Two part split mould Electric automatic lathe (<i>not necessary for UU test</i>) Three part split former (<i>not necessary for UU test</i>)	Dia. 38.1 mm N 205 N 210 TR 205/005 N 204 TR 205/004	Dia. 50 mm N 206 N 210 TR 205/045 N 204 + N 204/D TR 205/044	Dia. 100 mm N 208 N 210 TR 207/016 N 204 + N 204/I TR 207/014 (4 part)
PORE PRESSURE MEASUREMENT Digital manometer Transducer (0-1000 kPa) De-airing block Geotronic	* TR 305/030 * TR 205/510	* TR 205/500 * TR 205/510 * AD 002	* TR 205/500 * TR 205/510
VOLUME CHANGE MEASUREMENT Volume change measurement device Dial gauge: 30 mm (0.01) Transducer 25 mm (0.01) Geotronic	* TR 440/ST * T 628/E	* TR 440/ST * AD 115/026 * AD 002	* TR 440/ST * AD 115/026
CONSTANT PRESSURE SOURCES Air-water cylinder Manometer Bladder sealing ring placing tool	* TR 305 (x 2) TR 305/010 alt. TR 305/020 TR 305/4		
SILENT AIR COMPRESSOR Compressor 12 bar 50 litres auxiliary tank De-humidifier Air filter	D 816 D 816/1 D 816/2 D 816/3		
DATA ACQUISITION Multiplexer for linking in a network Cable (10 m long) Cable extension (10 m long) 4-way connector block Acquisition software		AD 021/010 ** AD 021/012 AD 021/004 AD 050/001	AD 308 and multiples of 8 channels AD 021/015*** AD 050/001
PROCESSING DATA "Triaxial test UU.CU.CD" software	AD 225/013		

* multiply these components by 3 to obtain test configuration with 3 triaxial cells.

** AD 021/012 not necessary for configuration with one triaxial cell only.
N. 1 AD 021/002, N. 2 AD 021/003, N. 2 AD 021/012 are necessary for configuration with three triaxial cells.

For performing a simple "UU" TRIAXIAL TEST the following equipment are not necessary:
Pore pressure measurement, volume change measurement, constant pressure sources, air compressor.
It is sufficient to buy the kit TR 301 - TR 301/002 - TR 301/004 - TR 301/006 - TR 301/008 (see page 85).

The following accessories for the cell are not necessary: TR 205/009 - TR 205/004 - TR 205/010 - N 204.

*** At least one cable extension for each transducer.