

## Appendix R

### Summaries for Geospec 3: Model Specification for Soil Testing

Table R1 - Summary of Current British Standard References and Replacement Eurocodes

BS Status	Relevant Updated Code for Citation	ID No.	Page no.	Existing Content of Technical Guidance Document	General Comments to define Scope of Updating / Specific Clauses in EN (s) / UK NA(s)	Scope of Updating
Technical Clauses in Report						
BS 733:Part 2:1987 - Pyknometers. Methods for Calibration and Use of Pyknometers.						
Confirmed, Current	-	Geospec3:733-2	76	(a) two 50 mL density bottles (pyknometers) with stoppers, complying with BS 733 : Part 2 : 1987 (BSI, 1987)	1987; Normative; The standard is is a normative testing standard which is current. No change is required.	1
BS 1796:Part 1:1989 - Test Sieving. Methods Using Test Sieves of Woven Wire Cloth and Perforated Metal Plate.						
Confirmed, Current	-	Geospec3:1796-2	84	(1) Fit to the receiver the test sieve of the largest aperture size appropriate to the maximum size of the soil particles present, and put the specimen on the sieve (see BS 1796 : Part 1 : 1989 (BSI, 1989)).	1989; Normative; The standard is is a normative testing standard which is current. No change is required.	1
BS 1377: 1990 Parts 1 to 9 - Methods of Test for Soils for Civil Engineering Purposes.						
Confirmed, Current	-	Geospec3:1377-2	19	In the early 1990s, the Geotechnical Engineering Office (GEO) embarked on a study of BS 1377 : 1990 (BSI, 1990), with a view to adapting it for use in Hong Kong.	1990; Normative; The standard is is a normative testing standard which is current. This citation in the Geospec 3 is historical. No change is required.	1
Confirmed, Current	-	Geospec3:1377-3	19	The standard test procedures mainly follow BS 1377 : 1990 (BSI, 1990), modified for use in Hong Kong.	1990; Normative; The standard is is a normative testing standard which is current. This citation in the Geospec 3 is historical. No change is required.	1
Confirmed, Current	-	Geospec3:1377-4	32	BS 1377 : 1990 (BSI, 1990) requires the received sample to be oven-dried at 105°C to 110°C so that it can be crumbled and riffled prior to wet sieving.	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-5	32	If requested by the Specifiers, it should be carried out in accordance with the recommended procedures described in Clause 9.4.6.1 of BS 1377 : Part 2 :1990 (BSI, 1990).	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-6	33	As suggested in BS 1377 : Part 3 : 1990 (BSI,1990), if calcium sulphate is the only sulphate salt present, its low solubility in water will keep the sulphate content of the aqueous extract below 1.2 g/litre.	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-7	33	The ion-exchange method, which is included in BS 1377 : Part 3 : 1990 (BSI, 1990) as an alternative to the gravimetric method, is not recommended for general use because it cannot be used if groundwater or aqueous soil extracts contain chloride, nitrate or phosphate ions.	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-8	61	(h) a wash bottle containing distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990 (BSI, 1990)	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-9	91	The apparatus as listed in Clause 8.1.3 as for Test Method 8.1 shall be used, except that Item (n), the dispersant, is not required, and should be replaced by distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990 (BSI, 1990).	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-10	94	(o) a wash bottle containing distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990 (BSI, 1990)	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-11	107	(n) a wash bottle containing distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990 (BSI, 1990)	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-12	114	The apparatus as listed in Clause 8.5.3 as for Test Method 8.5 shall be used, except that Item (r), the dispersant, shall be replaced with distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990 (BSI, 1990).	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-13	132	(e) distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990, and	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-14	138	(j) a wash bottle, preferably made of plastics, containing distilled water complying with Clause 5.1 of BS 1377 : Part 1 : 1990	1990; Normative; The standard is is a normative testing standard which is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-15	3	The technical standards presented in this Geospec are mainly based on BS 1377 (BSI, 1990). With the permission of the British Standards Institute, extracts from BS 1377 (BSI, 1990) and other British Standards have been incorporated into this Geospec.	1990; Normative; The standard is is a normative testing standard which is current. This citation in the Geospec 3 is historical. No change is required.	1
Confirmed, Current	-	Geospec3:1377-16	3	The technical standards presented in this Geospec are mainly based on BS 1377 (BSI, 1990). With the permission of the British Standards Institute, extracts from BS 1377 (BSI, 1990) and other British Standards have been incorporated into this Geospec.	1990; Normative; The standard is is a normative testing standard which is current. This citation in the Geospec 3 is historical. No change is required.	1
BS 718:1991 - Specification for Density Hydrometers.						
Confirmed, Current	-	Geospec3:718-2	104	(a) a hydrometer of the type illustrated in Figure 8.5, or otherwise fulfilling the requirements of BS 718 : 1991 (BSI, 1991) as set out as follows:	1991; Normative; The standard is is a normative specification which is current. No change is required.	1
Confirmed, Current	-	Geospec3:718-3	105	The following information shall be marked legibly on the stem or bulb of each hydrometer and shall not encroach on the scale or the figuring: – the basis of scale, e.g. g/mL at 20°C, – the maker's or vendor's name or mark, – an identification number, and – the number and version of the British Standard, i.e. BS 718 : 1991 (BSI, 1991).	1991; Normative; The standard is is a normative specification which is current. No change is required.	1

**Geospec 3 - Model Specification for Soil Testing**

**Table R1 - Summary of Current British Standard References and Replacement Eurocodes**

BS Status	Relevant Updated Code for Citation	ID No.	Page no.	Existing Content of Technical Guidance Document	General Comments to define Scope of Updating / Specific Clauses in EN (s) / UK NA(s)	Scope of Updating
<b>BS 2000:Part 50:1993 - Methods of Test for Soils for Petroleum and Its Products - Determination of Cone Penetration of Lubricating Grease.</b>						
Confirmed, Current	-	Geospec3:2000-2	62	(k) a penetrometer as used for bituminous material testing complying with <b>BS 2000 : Part 50 : 1993 (BSI, 1993)</b>	2000; Normative; The standard is a normative testing standard which is current. No change is required.	1
<b>BS 907:1965 - Specification for Dial Gauges for Linear Measurement.</b>						
Revised, Withdrawn	BS EN ISO 463:2006	Geospec3:907-2	326	The method of calibrating a dial gauge shall be in accordance with <b>BS 907 : 1965 (BSI,1965)</b> , AS 2103 (Standard Association of Australia, 1978) or any other relevant standards.	1965; Superseded; The standard was revised and withdrawn and replaced by BS 907:2008, which was in turn superseded by BS EN ISO 463:2006. The standard is a normative specification and should be updated.	4a
<b>BS 1797:1987 - Schedule for Tables for Use in the Calibration pf Volumetric Glassware.</b>						
Superseded, Withdrawn	BS EN ISO 4787:2011	Geospec3:1797-2	324	Volume change measuring devices, whether of burette type or transducer type, shall be calibrated by weighing the amount of deaired water that the volume change measuring devices displace at a measured temperature, applying any temperature corrections necessary in accordance with <b>BS 1797 : 1987 (BSI, 1987)</b> .	1987; Superseded; The standard is a normative specification and should be updated.	4a
<b>BS EN 10002:Part 3:1995 - Tensile Testing of Metallic Materials - Calibration of Force Proving Instruments Used for the Verification of Uniaxial Testing Machines</b>						
Superseded, Withdrawn	BS EN ISO 376-3:2011	Geospec3:10002-2	322	For calibration using a calibrated proving device as reference standard, mount the force-measuring device and the proving device in the calibration apparatus so that forces are applied to the devices along the loading axis of the frame. The reference proving device shall be in accordance with <b>BS EN 10002 : Part 3 : 1995 (BSI, 1995)</b> .	1995; Superseded; The standard is a normative specification and should be updated.	4a
<b>BS 410:Part 1:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Metal Wire Cloth.</b>						
<b>BS 410:Part 2:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Perforated Metal Plate.</b>						
Current (Part 1); Superceded, Withdrawn (Part 2)	- BS ISO 3310-1:2013	Geospec3:410-3	339	Test sieve. A sieve complying with <b>BS 410 : 2000 (BSI, 2000)</b> .	2000; Normative; Part 1 is current but the full title is BS410-1:2000, ISO 3310:2000. Part 2 has been withdrawn and replaced by by BS ISO 3310-2:2013. The standards are normative and should be updated to the new references.	4a
<b>Reference Section of Report</b>						
Confirmed, Current	-	Geospec3:733-1	317	BSI (1987). Pyknometers. Methods for Calibration and Use of Pyknometers (BS 733 : Part 2 : 1987). British Standards Institute, London, 1987, 13 p.	1987; Reference; The reference document has one citation. It is current. No change is required.	1
Confirmed, Current	-	Geospec3:1796-1	317	BSI (1989). Test sieving. Methods using test sieves of woven wire cloth and perforated metal plate (BS 1796 : Part 1 : 1989). British Standards Institute, London, 1989, 16 p.	1989; Reference; The reference document has one citation. It is current. No change is required.	1
Confirmed, Current	-	Geospec3:1377-1	317	BSI (1990). Methods of Test for Soils for Civil Engineering Purposes (BS 1377 : 1990, Parts 1 to 9). British Standards Institute, London, 1990, 406 p.	1990; Reference; The reference document has 15 citations. It is current. No change is required.	1
Confirmed, Current	-	Geospec3:718-1	317	BSI (1991). Specification for Density Hydrometers (BS 718 : 1991). British Standards Institute, London, 1991, 24 p.	1991; Reference; The reference document has two citations. It is current. No change is required.	1
Confirmed, Current	-	Geospec3:2000-1	317	BSI (1993). Methods of Test for Petroleum and Its Products - Determination of Cone Penetration of Lubricating Grease	1993; Reference; The reference document has one citation. It is current. No change is required.	1
Current	-	Geospec3:410-1	317	BSI (2000). Test Sieves - Technical Requirements and Testing. Test Sieves of Metal Wire Cloth (BS 410 : Part 1 : 2000). British Standards Institute, London, 2000, 22 p.	2000; Reference; The reference document has one general citation in the Glossary. It is current, however the full title is BS410-1:2000, ISO 3310:2000. The title should be updated.	3a
Superseded, Withdrawn	BS ISO 3310-2:2013	Geospec3:410-2	317	BSI (2000). Test Sieves - Technical Requirements and Testing. Test Sieves of Perforated Metal Plate (BS 410 : Part 2 : 2000). British Standards Institute, London, 2000, 18 p.	2000; Reference; The reference document has one general citation in the Glossary. It has been superceded and repalced by BS ISO 3310-2:2013.	4a
<b>References in Appendix A of Report</b>						
Superseded, Withdrawn	BS EN ISO 463:2006	Geospec3:907-1	327	BSI (1965). Specification for Dial Gauges for Linear Measurement (BS 907 : 1965), British Standards Institute, London, 1965, 20 p.	1965; Reference; The reference document has one citation. It has been superseded and replaced by BS EN ISO 463:2006, Geometrical Product Specifications (GPS) - Dimensional Measuring Equipment – Design and Metrological Characteristics of Mechanical Dial Gauges (BS EN ISO 463:2006) (Incorporating Corrigenda January 2009 and June 2011).	4a
Superseded, Withdrawn	BS EN ISO 4787:2011	Geospec3:1797-1	327	BSI (1987). Schedule for Tables for Use in the Calibration of Volumetric Glassware (BS 1797 : 1987), British Standards Institute, London, 1987, 8. p.	1987; Reference; The reference document has one citation. It has been superseded and replaced by BS EN ISO 4787:2011, Laboratory glassware - Volumetric Instruments - Methods for Testing of Capacity and for Use (ISO 4787 : 2010, Corrected Version 2010-06-05) (BS EN ISO 4787:2011).	4a
Superseded, Withdrawn	BS EN ISO 376-3:2011	Geospec3:10002-1	327	BSI (1995). Tensile Testing of Metallic Materials - Calibration of Force Proving Instruments Used for the Verification of Uniaxial Testing Machines (BS EN 10002 : Part 3 . 1995), British Standards Institute, London, 1995, 2. p.	1995; Reference; The reference document has one citation. It has been superseded and replaced by Metallic Materials - Calibration of force-proving instruments used for the verification of uniaxial testing machines (ISO 376:2011) (BS EN ISO 376:2011).	4a

Table R2 - Extracts of Relevant Sections or Clauses of the British Standards and Eurocodes / National Annexes

Relevant Updated Code for Citation	ID No.	Page no.	Scope of Updating	Extracts of Relevant Sections or Clauses of the superseded British Standard(s)	Extracts of Relevant Sections or Clauses of the replacement British/European Standards
Technical Clauses in Report					
BS 733:Part 2:1987 - Pyknometers. Methods for Calibration and Use of Pyknometers.					
-	Geospec3:733-2	73	1	Whole document.	NA
BS 1796:Part 1:1989 - Test Sieving. Methods Using Test Sieves of Woven Wire Cloth and Perforated Metal Plate.					
-	Geospec3:1796-2	84	1	Whole document.	NA
BS 1377: 1990 Parts 1 to 9 - Methods of Test for Soils for Civil Engineering Purposes.					
-	Geospec3:1377-2	19	1	Whole document.	NA
-	Geospec3:1377-3	19	1	Whole document.	NA
-	Geospec3:1377-4	32	1	Clause 3.2.2.1 of BS 1377 : Part 2 :1990	NA
-	Geospec3:1377-5	32	1	Clause 9.4.6.1 of BS 1377 : Part 2 :1990	NA
-	Geospec3:1377-6	33	1	Clause 5.1.2 of BS 1377 : Part 3 :1990	NA
-	Geospec3:1377-7	33	1	Clause 5.6 of BS 1377 : Part 3 :1990	NA
-	Geospec3:1377-8	61	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-9	91	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-10	94	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-11	107	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-12	114	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-13	132	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-14	138	1	Clause 5.1 of BS 1377 : Part 1 : 1990	NA
-	Geospec3:1377-15	3	1	Whole document.	NA
-	Geospec3:1377-16	3	1	Whole document.	NA
BS 718:1991 - Specification for Density Hydrometers.					
-	Geospec3:718-2	104	1	Whole document.	NA
-	Geospec3:718-3	105	1	Whole document.	NA
BS 2000:Part 50:1993 - Methods of Test for Soils for Petroleum and Its Products - Determination of Cone Penetration of Lubricating Grease.					
-	Geospec3:2000-2	62	1	Clause 5.1 of BS2000-50:1993	NA
BS 907:1965 - Specification for Dial Gauges for Linear Measurement.					
BS EN ISO 463:2006	Geospec3:907-2	326	4a	Clause B.3 of BS 907:1965	Clause 6.2 of BS EN ISO 463:2006
BS 1797:1987 - Schedule for Tables for Use in the Calibration pf Volumetric Glassware.					
BS EN ISO 4787:2011	Geospec3:1797-2	324	4a	Clause 1 of BS 1797:1987	Clause 7 of BS EN ISO 4787:2011
BS EN 10002:Part 3:1995 - Tensile Testing of Metallic Materials - Calibration of Force Proving Instruments Used for the Verification of Uniaxial Testing Machines.					
BS EN ISO 376-3:2011	Geospec3:10002-2	322	4a	Whole document.	Whole document.
BS 410:Part 1:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Metal Wire Cloth. BS 410:Part 2:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Perforated Metal Plate.					
- BS ISO 3310-1:2013	Geospec3:410-3	339	4a	Whole document.	Whole document.

**Geospec 3 - Model Specification for Soil Testing****Table R3 - Description of Standards, Differences and Recommended Amendments**

ID No.	Page	Scope of	Description of Design, Specification and/or		Effects of differences in Adopting	Recommended Amendments
			Quoted Standard(s)	Up-to-date Standard(s)		
Technical Clauses in Report						
BS 733:Part 2:1987 - Pyknometers. Methods for Calibration and Use of Pyknometers.						
Geospec3:733-2	76	1	Testing standard.	NA	NA	Reference document is up to date. No change required.
BS 1796:Part 1:1989 - Test Sieving. Methods Using Test Sieves of Woven Wire Cloth and Perforated Metal Plate.						
Geospec3:1796-2	84	1	Testing standard.	NA	NA	Reference document is up to date. No change required.
BS 1377: 1990 Parts 1 to 9 - Methods of Test for Soils for Civil Engineering Purposes.						
Geospec3:1377-2	19	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-3	19	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-4	32	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-5	32	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-6	33	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-7	33	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-8	61	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-9	91	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-10	94	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-11	107	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-12	114	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-13	132	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-14	138	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-15	3	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
Geospec3:1377-16	3	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
BS 718:1991 - Specification for Density Hydrometers.						
Geospec3:718-2	104	1	Test related specification.	NA	No change.	Reference document is up to date. No change required.
Geospec3:718-3	105	1	Test related specification.	NA	No change.	Reference document is up to date. No change required.

### Geospec 3 - Model Specification for Soil Testing

Table R3 - Description of Standards, Differences and Recommended Amendments

ID No.	Page	Scope of	Description of Design, Specification and/or		Effects of differences in Adopting	Recommended Amendments
			Quoted Standard(s)	Up-to-date Standard(s)		
BS 2000:Part 50:1993 - Methods of Test for Soils for Petroleum and Its Products - Determination of Cone Penetration of Lubricating Grease.						
Geospec3:2000-2	62	1	Testing standard.	NA	No change.	Reference document is up to date. No change required.
BS 907:1965 - Specification for Dial Gauges for Linear Measurement.						
Geospec3:907-2	326	4a	Test related specification.	BS EN ISO 463:2006	No change.	Citation to be updated to current standard.
BS 1797:1987 - Schedule for Tables for Use in the Calibration pf Volumetric Glassware.						
Geospec3:1797-2	324	4a	Test related specification.	BS EN ISO 4787:2011	No change.	Citation to be updated to current standard.
BS EN 10002:Part 3:1995 - Tensile Testing of Metallic Materials - Calibration of Force Proving Instruments Used for the Verification of Uniaxial Testing Machines.						
Geospec3:10002-2	322	4a	Test related specification.	BS EN ISO 376-3:2011	No change.	Citation to be updated to current standard.
BS 410:Part 1:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Metal Wire Cloth.						
BS 410:Part 2:2000 - Test Sieves - Technical Requirements and Testing. Test Sieves of Perforated Metal Plate.						
Geospec3:410-3	339	4a	Testing standard.	Part 1 remains unchanged; Part 2 has been updated as BS ISO 3310-2:2013	No change.	Citation to be updated to current standards.
Reference Section of Report						
Geospec3:733-1	317	1	This reference document is: Confirmed, Current.	The current document(s) is (are): BS 733 : Part 2 : 1987	No change.	Retain the existing reference.
Geospec3:1796-1	317	1	This reference document is: Confirmed, Current.	The current document(s) is (are): BSBS 1796 : Part 1 : 1989	No change.	Retain the existing reference.
Geospec3:1377-1	317	1	This reference document is: Confirmed, Current.	The current document(s) is (are): BSBS 1377 : 1990, Parts 1 to 9	No change.	Retain the existing reference.
Geospec3:718-1	317	1	This reference document is: Confirmed, Current.	The current document(s) is (are): BSBS 718 : 1991	No change.	Retain the existing reference.
Geospec3:2000-1	317	1	This reference document is: Confirmed, Current.	The current document(s) is (are): BSBS 2000 : Part 50 : 1993	No change.	Retain the existing reference.
Geospec3:410-1	317	3a	This reference document is: Current.	The current document(s) is (are): BS 410-1:2000, ISO 3310-1:2000	No change.	Retain the existing reference, but update to the full BS ISO title.
Geospec3:410-2	317	4a	This reference document is: Superseded, Withdrawn.	The current document(s) is (are): BS ISO 3310-2:2013	No change.	Replace the existing reference with BS ISO 3310-2:2013
References in Appendix A of Report						
Geospec3:907-1	327	4a	This reference document is: Superseded, Withdrawn.	The current document(s) is (are): BS EN ISO 463:2006	No change.	Replace the existing reference with BS EN ISO 463:2006.
Geospec3:1797-1	327	4a	This reference document is: Superseded, Withdrawn.	The current document(s) is (are): BS EN ISO 4787:2011	No change.	Replace the existing reference with BS EN 12390-1:2012 and BS EN ISO 4787:2011.
Geospec3:10002-1	327	4a	This reference document is: Superseded, Withdrawn.	The current document(s) is (are): BS EN ISO 376-3:2011	No change.	Replace the existing reference with BS EN ISO 376-3:2011.



## Geospec 3 - Model Specification for Soil Testing

**Table R4 - Recommended Revisions to Existing Clauses referring to British Standards**

Page no.	BS Referenced in Technical Guidance Document	Scope of Updating <sup>(1)</sup>	ID No.	Existing Content of Technical Guidance Document	Recommended Content for Updated Technical Guidance Document
3	BS 1377: 1990	1	Geospec3:1377-15	The technical standards presented in this Geospec are mainly based on <b>BS 1377 (BSI, 1990)</b> . With the permission of the British Standards Institute, extracts from BS 1377 (BSI, 1990) and other British Standards have been incorporated into this Geospec.	No change.
3	BS 1377: 1990	1	Geospec3:1377-16	The technical standards presented in this Geospec are mainly based on BS 1377 (BSI, 1990). With the permission of the British Standards Institute, extracts from <b>BS 1377 (BSI, 1990)</b> and other British Standards have been incorporated into this Geospec.	No change.
19	BS 1377: 1990	1	Geospec3:1377-2	In the early 1990s, the Geotechnical Engineering Office (GEO) embarked on a study of <b>BS 1377 : 1990 (BSI, 1990)</b> , with a view to adapting it for use in Hong Kong.	No change.
19	BS 1377: 1990	1	Geospec3:1377-3	The standard test procedures mainly follow <b>BS 1377 : 1990 (BSI, 1990)</b> , modified for use in Hong Kong.	No change.
32	BS 1377: 1990	1	Geospec3:1377-4	<b>BS 1377 : 1990 (BSI, 1990)</b> requires the received sample to be oven-dried at 105°C to 110°C so that it can be crumbled and riffled prior to wet sieving.	No change.
32	BS 1377: 1990	1	Geospec3:1377-5	If requested by the Specifiers, it should be carried out in accordance with the recommended procedures described in Clause 9.4.6.1 of <b>BS 1377 : Part 2 :1990 (BSI, 1990)</b> .	No change.
33	BS 1377: 1990	1	Geospec3:1377-6	As suggested in <b>BS 1377 : Part 3 : 1990 (BSI,1990)</b> , if calcium sulphate is the only sulphate salt present, its low solubility in water will keep the sulphate content of the aqueous extract below 1.2 g/litre.	No change.
33	BS 1377: 1990	1	Geospec3:1377-7	The ion-exchange method, which is included in <b>BS 1377 : Part 3 : 1990 (BSI, 1990)</b> as an alternative to the gravimetric method, is not recommended for general use because it cannot be used if groundwater or aqueous soil extracts contain chloride, nitrate or phosphate ions.	No change.
61	BS 1377: 1990	1	Geospec3:1377-8	(h) a wash bottle containing distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990 (BSI, 1990)</b>	No change.
62	BS 2000:Part 50:1993	1	Geospec3:2000-2	(k) a penetrometer as used for bituminous material testing complying with <b>BS 2000 : Part 50 : 1993 (BSI, 1993)</b>	No change.
73	Geospec3:733-2	1	Geospec3:733-2	(a) two 50 mL density bottles (pyknometers) with stoppers, complying with <b>BS 733 : Part 2 : 1987 (BSI, 1987)</b>	No change.
84	Geospec3:1796-2	1	Geospec3:1796-2	(1) Fit to the receiver the test sieve of the largest aperture size appropriate to the maximum size of the soil particles present, and put the specimen on the sieve (see <b>BS 1796 : Part 1 : 1989 (BSI, 1989)</b> ).	No change.
91	BS 1377: 1990	1	Geospec3:1377-9	The apparatus as listed in Clause 8.1.3 as for Test Method 8.1 shall be used, except that Item (n), the dispersant, is not required, and should be replaced by distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990 (BSI, 1990)</b> .	No change.
94	BS 1377: 1990	1	Geospec3:1377-10	(o) a wash bottle containing distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990 (BSI, 1990)</b>	No change.
104	BS 718:1991	1	Geospec3:718-2	(a) a hydrometer of the type illustrated in Figure 8.5, or otherwise fulfilling the requirements of <b>BS 718 : 1991 (BSI, 1991)</b> as set out as follows:	No change.
105	BS 718:1991	1	Geospec3:718-3	The following information shall be marked legibly on the stem or bulb of each hydrometer and shall not encroach on the scale or the figuring: – the basis of scale, e.g. g/mL at 20°C, – the maker's or vendor's name or mark, – an identification number, and – the number and version of the British Standard, i.e. <b>BS 718 : 1991 (BSI, 1991)</b> .	No change.
107	BS 1377: 1990	1	Geospec3:1377-11	(n) a wash bottle containing distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990 (BSI, 1990)</b>	No change.

## Geospec 3 - Model Specification for Soil Testing

**Table R4 - Recommended Revisions to Existing Clauses referring to British Standards**

Page no.	BS Referenced in Technical Guidance Document	Scope of Updating <sup>(1)</sup>	ID No.	Existing Content of Technical Guidance Document	Recommended Content for Updated Technical Guidance Document
114	BS 1377: 1990	1	Geospec3:1377-12	The apparatus as listed in Clause 8.5.3 as for Test Method 8.5 shall be used, except that Item (r), the dispersant, shall be replaced with distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990 (BSI, 1990)</b> .	No change.
132	BS 1377: 1990	1	Geospec3:1377-13	(e) distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990</b> , and	No change.
138	BS 1377: 1990	1	Geospec3:1377-14	(j) a wash bottle, preferably made of plastics, containing distilled water complying with Clause 5.1 of <b>BS 1377 : Part 1 : 1990</b>	No change.
317	BS 733-2: 1987	1	Geospec3:733-1	BSI (1987). Pyknometers. Methods for Calibration and Use of Pyknometers (BS 733 : Part 2 : 1987). British Standards Institute, London, 1987, 13 p.	[No change.]
317	BS 1796-1: 1989	1	Geospec3:1796-1	BSI (1989). Test sieving. Methods using test sieves of woven wire cloth and perforated metal plate (BS 1796 : Part 1 : 1989). British Standards Institute, London, 1989, 16 p.	[No change.]
317	BS 1377: 1990	1	Geospec3:1377-1	BSI (1990). Methods of Test for Soils for Civil Engineering Purposes (BS 1377 : 1990, Parts 1 to 9). British Standards Institute, London, 1990, 406 p.	[No change.]
317	BS 718: 1991	1	Geospec3:718-1	BSI (1991). Specification for Density Hydrometers (BS 718 : 1991). British Standards Institute, London, 1991, 24 p.	[No change.]
317	BS 2000-50: 1993	1	Geospec3:2000-1	BSI (1993). Methods of Test for Petroleum and Its Products - Determination of Cone Penetration of Lubricating Grease (BS 2000 : Part 50 : 1993). British Standards Institute, London, 1993, 10 p.	[No change.]
317	BS 410-1: 2000	3a	Geospec3:410-1	BSI (2000). Test Sieves - Technical Requirements and Testing. Test Sieves of Metal Wire Cloth (BS 410 : Part 1 : 2000). British Standards Institute, London, 2000, 22 p.	BSI (2000). Test Sieves - Technical Requirements and Testing. <b>Part 1: Test Sieves of Metal Wire Cloth (BS 410-1:2000, ISO 3310-1:2000)</b> . British Standards Institute, London, 2000, 22 p ( <b>Incorporating Corrigenda December 2005</b> ).
317	BS 410-2: 2000	4a	Geospec3:410-2	BSI (2000). Test Sieves - Technical Requirements and Testing. Test Sieves of Perforated Metal Plate (BS 410 : Part 2 : 2000). British Standards Institute, London, 2000, 18 p.	BSI ( <b>2013</b> ). Test Sieves - Technical Requirements and Testing. <b>Part 2: Test Sieves of Perforated Metal Plate (BS ISO 3310-2:2013)</b> . British Standards Institute, London, <b>2013</b> , 18 p.
322	BS EN ISO 10002-3:1995	4a	Geospec3:10002-2	For calibration using a calibrated proving device as reference standard, mount the force-measuring device and the proving device in the calibration apparatus so that forces are applied to the devices along the loading axis of the frame. The reference proving device shall be in accordance with <b>BS EN 10002 : Part 3 : 1995 (BSI, 1995)</b> .	For calibration using a calibrated proving device as reference standard, mount the force-measuring device and the proving device in the calibration apparatus so that forces are applied to the devices along the loading axis of the frame. The reference proving device shall be in accordance with <b>BS EN ISO 376 : 2011 (BSI, 2011b)</b> .
324	BS 1797:1987	4a	Geospec3:1797-2	Volume change measuring devices, whether of burette type or transducer type, shall be calibrated by weighing the amount of deaired water that the volume change measuring devices displace at a measured temperature, applying any temperature corrections necessary in accordance with <b>BS 1797 : 1987 (BSI, 1987)</b> .	Volume change measuring devices, whether of burette type or transducer type, shall be calibrated by weighing the amount of deaired water that the volume change measuring devices displace at a measured temperature, applying any temperature corrections necessary in accordance with <b>BS EN ISO 4787 : 2011 (BSI, 2011a)</b> .
326	BS 907:1965	4a	Geospec3:907-2	The method of calibrating a dial gauge shall be in accordance with <b>BS 907 : 1965 (BSI, 1965)</b> , AS 2103 (Standard Association of Australia, 1978) or any other relevant standards.	The method of calibrating a dial gauge shall be in accordance with <b>BS EN ISO 463 : 2006 (BSI, 2008)</b> , AS 2103 (Standard Association of Australia, 1978) or any other relevant standards.
327	BS 907:1965	4a	Geospec3:907-1	BSI (1965). Specification for Dial Gauges for Linear Measurement (BS 907 : 1965), British Standards Institute, London, 1965, 20 p.	<b>BSI (2008). Geometrical Product Specifications (GPS) - Dimensional Measuring Equipment – Design and Metrological Characteristics of Mechanical Dial Gauges (BS EN ISO 463:2006)</b> . British Standards Institute, London, 2008, 14 p ( <b>Incorporating Corrigenda January 2009 and June 2011</b> ).
327	BS 1797:1987	4a	Geospec3:1797-1	BSI (1987). Schedule for Tables for Use in the Calibration of Volumetric Glassware (BS 1797 : 1987), British Standards Institute, London, 1987, 8. p.	<b>BSI (2011a). Laboratory glassware - Volumetric Instruments - Methods for Testing of Capacity and for Use (BS EN ISO 4787:2011)</b> . British Standards Institute, London, 2008,
327	BS EN ISO 10002-3:1995	4a	Geospec3:10002-1	BSI (1995). Tensile Testing of Metallic Materials - Calibration of Force Proving Instruments Used for the Verification of Uniaxial Testing Machines (BS EN 10002 : Part 3 . 1995), British Standards Institute, London, 1995, 2. p.	<b>BSI (2011b). Metallic Materials - Calibration of force-proving instruments used for the verification of uniaxial testing machines (BS EN ISO 376:2011)</b> . British Standards Institute, London, 2008,
339	BS 410:2000	4a	Geospec3:410-3	Test sieve. A sieve complying with BS 410 : 2000 (BSI, 2000).	Test sieve. A sieve complying with <b>BS 410-1:2000, ISO 3310:2000 (BSI, 2000a) or BS ISO 3310-2:2013 (BSI, 2000b)</b> .