

ISO 18674-1:2015-05 (E)

Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation - Part 1: General rules

Contents		Page
Foreword		iv
1	Scope	1
2	Normative references	1
3	Terms and symbols	2
3.1	Terms	2
3.2	Symbols	4
4	Principal requirements	5
4.1	Geotechnical monitoring in connection with geotechnical design	5
4.2	Geotechnical monitoring in connection with specific questions	5
4.3	Requirements of a geotechnical monitoring project	5
4.4	Geodetic measurements	6
4.5	Safety requirements	6
5	Requirements of a geotechnical monitoring system	6
5.1	General	6
5.2	Robustness	7
5.3	Influencing factors	7
5.4	Redundancy	7
5.5	Stability of sensor signal	7
5.6	Function check and calibration	8
6	Location of measuring points and geotechnical parameters	8
6.1	Location of measuring points	8
6.1.1	The measuring points can be located at free surfaces, at the interface between any two media, or inside of a medium	8
6.2	Measurement and monitoring of geotechnical parameters	8
7	Carrying out the measurements	9
8	Data processing and verification	9
9	Reporting	10
9.1	Installation report	10
9.2	Monitoring report	11
Annex A (normative)	Minimum requirements on content of instrument data sheets	13
Annex B (normative)	Geotechnical measurements in boreholes	14
Annex C (informative)	Field measurements in connection with the design and construction of geotechnical structures	17
Annex D (informative)	Measurement and monitoring of geotechnical key parameters	19
Annex E (informative)	Types of instruments and monitoring methods commonly used	21
Bibliography		27