ISO 18674-8:2023-09 (E)

Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation - Part 8: Measurement of loads: Load cells

Contents

Page

Foreword iv

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Symbols and abbreviated terms 3

5 Instruments 3
5.1 General 3
5.2 Electric load cells 4
5.3 Hydraulic load cells 5
5.4 Instruments for specific applications 6
5.4.1 Anchor load cells 6
5.4.2 Load cell for cast-in-place concrete piles 7
5.5 Measurement accuracy 9

6 Installation and measuring procedure 9
6.1 Installation 9
6.1.1 General 9
6.1.2 Anchor load cells 10
6.1.3 Load cells at the base of cast-in-place concrete piles 10
6.1.4 Load cells for struts across excavations 11
6.2 Carrying out the measurement 11
6.2.1 Instrumentation check and calibration 11
6.2.2 Measurement 12

7 Data processing and evaluation 12

8 Reporting 13
8.1 Installation report 13
8.2 Monitoring report 13

Annex A (informative) Geotechnical applications 14

Annex B (informative) Measuring examples 15

Bibliography 33