DIN EN ISO 18674-8:2023-12 (E)

Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation - Part 8: Measurement of loads: Load cells (ISO 18674-8:2023)

Contents

Page

European foreword 3

Foreword 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 Symbols and abbreviated terms 7

5 Instruments 7
5.1 General 7
5.2 Electric load cells 8
5.3 Hydraulic load cells 9
5.4 Instruments for specific applications 10
5.4.1 Anchor load cells 10
5.4.2 Load cell for cast-in-place concrete piles 11
5.5 Measurement accuracy 13

6 Installation and measuring procedure 13
6.1 Installation 13
6.1.1 General 13
6.1.2 Anchor load cells 14
6.1.3 Load cells at the base of cast-in-place concrete piles 14
6.1.4 Load cells for struts across excavations 15
6.2 Carrying out the measurement 15
6.2.1 Instrumentation check and calibration 15
6.2.2 Measurement 16

7 Data processing and evaluation 16

8 Reporting 17
8.1 Installation report 17
8.2 Monitoring report 17

Annex A (informative) Geotechnical applications 18

Annex B (informative) Measuring examples 19

Bibliography 37