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**Calibration Specification for Static Cone Penetrometers
(English Translation)**

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Table of Contents

Introduction (II)

1 Scope (1)

2. References (1)

3 Terms (1)

4 Overview (1)

4.1 Static sounding instrument works and use (1)

4.2 Structure and classification (2)

5 Metrological characteristics (3)

5.1 Appearance (3)

5.1 Appearance (3)

Probe geometry 5.2 (3)

6 Calibration conditions (4)

Environmental conditions 6.1 (4)

6.2 Calibration Equipment (4)

Calibration Method 7 (4)

9 Calibration cycle (8)

A schematic diagram of the detected attachment appendix (9) Appendix B Calibration Certificate page format (10) Appendix C Static penetrometer Evaluation of Uncertainty in Measurement Example (13)

Introduction

This specification "National Calibration Specifications writing rules," according to JJF 1071-2010, JJF 1001-2011 "Tong Metering terms and definitions ", JJF 1059.1-2012" Evaluation and Expression of Uncertainty in Measurement write "Rules.

This specification in the development process to fully consider the JJG391-2009 "force sensor test procedures", GB/T 12745-2007 "soil test equipment penetrometer", CECS04.88 "of static sounding technical standards" YS5223-2000 "static cone penetration testing procedures", TB10018-2003 "railway engineering geology situ testing procedures"

Terminology, symbols and definitions of static sounding instrument, as well as the relevant technical requirements, technical specifications and test methods. this Specification presents static sounding instrument metrological characteristics specific calibration conditions, calibration items and calibration methods.

This specification is the first release.

Static sounding instrument calibration specification

1 Scope

This instruction applies to resistive strain gauge static sounding measurement system (hereinafter referred to as static penetrometer) calibration.

2. References

This specification refers to the following documents.

JJG391-2009 force sensor verification procedures GB/T 12745-2007 soil test equipment penetrometer CECS04. 88 static sounding technical standards YS5223-2000 static cone penetration testing procedures TB10018-2003 railway engineering geology situ test procedures for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 Terms

3.1 Static penetrometer staticcone penetrometers in the static pressure of a certain size uniform vertically tapered probe is pressed into the soil, according to the resistance by measuring the size of the commentary Price soil mechanical properties in situ geotechnical test equipment.

Note: This specification refers to static sounding instrument only for the measurement system.

3.2 Probe probes

In direct contact with the soil, having a predetermined shape, size, mass and hardness of the metal cone of the sensor.

3.3 single bridge probe singlebridgeprobes it can only be used to measure the cone resistance (specific penetration resistance) sensors.

3.4 Bridging probe doublebridgeprobes Biography can be used to measure the cone resistance (Static CPT tip resistance) and a side wall friction resistance (friction resistance sidewall units) of Sensors.

3.5 pore pressure static probe piezo-coneprobes Acronym pore pressure probe in the probe another permeable filter installation and measurement of pore water pressure sensing element can be tested EXPLORATION Suffered head cone resistance, friction

resistance and side walls of the pore water pressure sensor.

4 Overview

4.1 static sounding instrument works and use Static penetrometer probe uniform vertically pressed into the soil by soil probe resistance measuring element, transformed Electrical signal output, and through the penetration resistance and the qualitative relationship between the engineering geological characteristics of the soil and statistical correlation, to the realization of the soil profile, provided for bearing capacity, select the pile bearing stratum and estimated pile capacity and other engineering geology