

ICS 07.060
CCS P10



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 15406-2007

Replacing GB/T 15406-1994

**Primary parameter and general specification for geotechnical
engineering instrument**

岩土工程仪器基本参数及通用技术条件

Issued on: June 11, 2007

Implemented on: September 1, 2007

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard is GB/T 15406-1994 "geotechnical equipment basic parameters and general technical conditions" amendments and GB/T 15406- Compared to 1994, the main changes

are as follows:

- Increasing the dam monitoring (observation) The instrument, rock test (test) equipment;
- This standard geotechnical instrumentation measurement units and symbols of unity;
- This standard original specified product categories, basic parameters, technical requirements and other relevant content to broaden and made the appropriate adjustment in the provision Whole, and to be further clarified;
- With the domestic geotechnical engineering equipment production technology, technological level and variety of electronic components, quality and other aspects of progress and improvement, The common technical standard for environmental testing instrument Geotechnical Engineering Simulation factors also make the principles laid down. Appendix A of this standard is the data appendix. The standard proposed by the People's Republic of China Ministry of Water Resources. This standard by the Department of International Cooperation, Science and Technology. This standard is mainly drafted by: MWR hydrological instruments and geotechnical engineering Instrument Quality Supervision, Inspection and Testing Center, Nanjing Hydraulic Research Hospital, Nanjing Automation Hydrological Institute, State Power Automation Research Institute, Nanjing Electric Power Automation Equipment Factory. Participated in the drafting of this standard. national hydrological instruments and geotechnical engineering Instrument License Examination Department, Ministry of Water Resources Dam Safety Management Center, River Lehigh University, Changjiang Water Resources Sciences, Nanjing Soil Instrument Co., Ltd. Drafters of this standard. Miss Xu, a new chapter, Chen Yu, Guan Ping Hong, Lu Youqing, Xuguo Long, Shen province III. Participate drafters of this standard. Shi Minghua, Xu Haifeng, Li Zechong, GU Chong, Li Lei, Zhang Dekang, Zhou Huo-ming, a Ning. This standard replaces the standards previously issued as follows:

--- GB/T 15406-1994.

Standardization of geotechnical instrumentation foundation is weak, product variety, low-volume, high precision is very prominent, because the product Cross-industry, cross-professional applications and the complexity of market demand, making all kinds of soil test equipment, dam monitoring (observation) instruments and rock samples Test (test) instrument is very diverse variety of products, which is measured in a number of specific terms of a dimensionless unit, terminology symbols, error calculation are Extremely non-standard, therefore, the standard measurement instrument for geotechnical engineering units and symbols of a unified and standardized, general requirements should be consistent with national The basic provisions of the relevant standards. This standard is water, electricity, transportation, mining and port, civil and other industries widely used by the soil test equipment, dam monitoring (Concept Test) the basic standard rock instrumentation and test (test) instrument which together constitute the three professional geotechnical instrumentation products. Geotechnical engineering instrument basic

parameters and general technical conditions

1 Scope

GB/T 15406-2007 is the Chinese national standard on primary parameter and general specification for geotechnical engineering instrument, in the field of natural and applied sciences. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 June 2007 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2007. Classification: ICS 07.060, CCS P10. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the geotechnical instrumentation product classification, basic parameters and general technical requirements, test methods, inspection rules and packaging, Signs, transportation, storage and so on. This standard applies to geotechnical engineering instrumentation product development, design, production and use. This standard does not apply to the earthquake, hydraulics and environmental monitoring of the amount of equipment.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 9359 Basic environmental testing instruments hydrological conditions and methods

GB 9969.1 Instructions General Industrial Products

GB/T 15464 instrumentation packaging technology

GB/T 21029 geotechnical engineering Instrument Series spectrum

GB/T 50279-1998 Standard for fundamental terms of geotechnical engineering

SL268-2001 dam safety automatic monitoring system equipment basic technical conditions

3 Terms and Definitions

GB/T 50279-1998, terms and definitions established SL268-2001 apply to this standard.

4 Products

4.1 Classification of soil test equipment Soil test equipment into laboratory test equipment and in situ tests (test) instrument.

4.1.1 The laboratory test instrument Laboratory test instrument divided according to their function.

- a) chemical analysis and mineral analysis equipment;
- b) physical test instrument;
- c) mechanical test equipment.

4.1.2 situ trials (testing) equipment Situ test (test) instrument divided according to their functions.

- a) physical test instrument;
- b) mechanical test equipment.

4.2 Classification of dam safety monitoring (observation) of the instrument Dam Monitoring (observation) instrument divided according to their functions.

- a) deformation monitoring (observation) instrument;
- b) pressure/strain monitoring (observation) instrument;