ICS 25.040.40
CCS N10

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13283-2008

Replacing GB/T 13283-1991

Accuracy class of measuring instruments and display instruments for industrial process measurement and control

工业过程测量和控制用检测仪表和显示仪表精确度等级

Issued on: June 30, 2008 **Implemented on: January 1, 2009**

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Standardization Administration of China

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Foreword

This standard replaces GB/T 13283-1991 "industrial process measurement and control instrumentation and display meter accuracy level." This standard and GB/T 13283-1991 main differences are as follows:

--- Increased Chapter 2, "Normative references";

--- In Chapter 3, delete the terms and definitions GB/T 17212-1998 already included;

4.1 Note 1 original "when necessary, accuracy class may be used in parentheses, where

0.4 applies to gauge." Changed to "include Accuracy class within the number is not recommended. " In addition, in accordance with the provisions of GB/T 1.1-2000 were editorial changes. The standard proposed by China Machinery Industry Federation. The standard measurement and control Standardization Technical Committee (SAC/TC124) first sub-Technical Committee of the National Industrial Process. This standard is drafted by: Shanghai Institute of Industrial Automation Instrumentation. Participated in the drafting of this standard. Shanghai Automation Instrumentation System Inspection and Testing Institute. The main drafters of this standard. Li Minghua, Tsai Wen-chi. The standard standard replaces the previous editions.

--- GB/T 13283-1991. Industrial process measurement and control instrumentation and display Meter Accuracy class

1 Scope

GB/T 13283-2008 is the Chinese national standard on accuracy class of measuring instruments and display instruments for industrial process measurement and control, in the field of manufacturing engineering. 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 30 June 2008 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 January 2009. Classification: ICS 25.040.40, CCS N10. 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 industrial process measurement and control instrumentation and display instruments (hereinafter referred to as meter) accuracy grade and their use Guidelines. This standard applies to industrial process measurement and control analog or digital instrumentation and display instruments. This standard does not apply to direct representation and the accuracy of the relevant factors of the instrument with numerical indication errors.

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 17212 industrial process measurement and control - Terms and definitions (GB/T 17212-1998, idt IEC 60902. 1987)

3 Terms and Definitions

GB/T 17212 and established the following terms and definitions apply to this standard.

3.1 Showing the value of the instrument to be measured (convention) degree of conformity to the true value.

Note. The "precision" is a commonly used term that contains a systematic error, random error, hysteresis, dead zone effect and so on. While all of these are combined in error "Accuracy" under this heading is easy to use, but it is a qualitative term, which itself does not assign values.

3.2 Meet certain metrological requirements, the error kept within predetermined limits of the instrument Grades, levels.

Note. Accuracy class usually numbers or symbols indicate agreement, known as level indicators.

3.3 Showing the value of the instrument is measured by subtracting the (convention) true value.

3.4 Indication Error meter divided by a predetermined value, and expressed as a percentage.

Note. The specified value is often called a reference value, it can be the instrument input or

output range, upper limit of the range, scale length.

3.5 Divided by the meter indication error is measured (convention) true value, and expressed as a percentage.

Note. Sometimes to show the error of the instrument is divided by the measured value indication or reading, and expressed as a percentage.