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**Reference conditions and procedures for testing industrial and
process measurement transmitters - Part 1: General procedures
for all types of transmitters
(English Translation)**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting:

This document is part 1 of GB/T 42567 "Reference Conditions and Procedures for Testing Transmitters for Industrial Process Measurement": GB/T 42567 has the following parts have been published:

- Part 1: General procedures for all types of transmitters;
- Part 2: Specific procedures for pressure transmitters;
- Part 3: Specific procedures for temperature transmitters:

This document is equivalent to IEC 62828-1:2017 "Reference conditions and procedures for testing of industrial process measurement transmitters Part 1: All General Procedures for Type Transmitters":

The following minimal editorial changes have been made to this document:

- Modify the obvious errors in Table 17: Correct the "upper row actual" under the "circular average" column to "upper row average":

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

Most of the current standards for industrial process measurement transmitters are relatively old and based on analog transmitters: same at the same time, many industrial process measurement transmitters are also developing, and they are very different from analog transmitters: they are usually digital, and in the computing department Part (mainly digital electronic circuits) and measurement part (mainly mechanical structure), both include more functions and newer interfaces: currently saved There are relevant standards for measuring digital transmitters in some processes, but there is still a lack of suitable test methods for some performance aspects:

Existing test standards for industrial process measurement transmitters are scattered documents, so identifying and selecting Selecting all transmitter standards for measuring a specific process quantity (pressure, temperature, flow, level, etc:) is difficult, impractical and time consuming:

In order to solve the above problems, in order to be better used by manufacturers and users, and to systematically provide different types of industrial process measurement transmitters for a comprehensive test method, GB/T 42567 is proposed to be composed of the following five parts:

- Part 1: General procedures for all types of transmitters: The purpose is to provide measurement and control systems for industrial processes and machinery all types of transmitters used provide test reference conditions and a framework for the procedure: